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CHATTANOOGA,
TENNESSEE;
HAMILTON COUNTY,
AND
LOOKOUT MOUNTAIN.

LOUIS L. PARHAM.

CHATTANOOGA.
1876.

CHATTANOOGA,
TENNESSEE;
HAMILTON COUNTY,
AND
LOOKOUT MOUNTAIN.

An Epitome of Chattanooga from her Early Days down to the Present; Hamilton County, its Soil, Climate, Area, Population, Wealth, Etc., Lookout Mountain, its Battle-fields, Beauties, Climate, and other Attractions.

PREPARED AND PUBLISHED BY
LOUIS L. PARHAM.

CHATTANOOGA, TENN.

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PREFATORY REMARKS.

The Publisher of the following pages begs the indulgence of the reader to explain, briefly, the causes which led to the preparation of this work, as well as to thank, in this connection, those who have rendered aid and assistance. The Publisher was reared in Chattanooga, and is somewhat familiar with its history; he has watched its progress, for some years, with no little interest; and having been connected with the Press most of the time, in different capacities, he has had facilities for obtaining information not afforded those of other callings in life. No attempt is made at rhetorical display; no fine effect by high-sounding words, or finished phrase, is sought to be made; and if, at times, fancy plumes its wings and soars beyond the commonplace realms of sober facts, it will only be found an embellishment of those truths which he has been very careful to arrive at, from all sources of information at his hands. The history of Chattanooga is a history of adventure, of peril, fortitude and energy, as applicable to its earlier days—and of perseverance under the most trying circumstances within the past decade. Chattanooga has had her trials, and many have stood by her; adversity has grappled with her, and although her masts were well-nigh taken away and the old ship very nearly scuttled, as it were, Chattanooga has withstood the shock, and to-day begins to ride prosperously the troubrous sea, whose waves at one time seemed to threaten her prosperity. At such times, we could exclaim with a gifted and eloquent author, "The summer soldier and the sunshine patriot may desert her cause, but he who stands it now, deserves the love and praise of men and women." Without invidious selections, we wish to tender our thanks to Messrs. J. W. James, John P. Long, W. P. Rathburn, C. E. Stanley, R. M. Hooke, the Centennial Committee, the members of the City Council, and all others who kindly proffered and rendered aid to the Publisher; and finally we wish to express the hope that one and all interested in her welfare may reap a rich share of the benefits that may flow from this humble contribution to the publication of the Past and the Present of Chattanooga, and of Hamilton County.

CHATTANOOGA.

HISTORICAL RECORD.

The settlement of Chattanooga commenced in 1835. At that period, the site of the present city was one vast forest, through which the aborigines roamed at will. In December of the previous year, the treaty for the lands in this section was made with the Indians, and ratified by the U. S. Senate May, 1836. At this time there were but few whites here—a primitive hut did service for a hotel—DANIEL HENDERSON, Esq., father-in-law of our esteemed fellow-citizen, RICHARD HENDERSON, Esq., doing the honors of the host.

The name of the place was "Ross' Landing," taking its suggestive title from JOHN ROSS, a distinguished half-breed, who resided here, and the Chief of the Cherokee nation. He educated his daughters in North Carolina—thus evincing his estimate of culture and knowledge. He established a ferry and warehouse at the Tennessee River, and resided at Rossville, just over the line, 5 miles south of Chattanooga, in Georgia.

In 1835, among the whites who settled here were SAMUEL WILLIAMS, who is still living, DANIEL HENDERSON, and JOHN KEENEY. In 1836 came AARON M. RAWLINGS, JNO. P. LONG, D. A. WILDS, W. M. DAVIS, SAMUEL STEWART, WM. LONG, Dr. NATHAN HARRIS. In 1837 the first postoffice was established, and the first postmaster was Capt. JOHN P. LONG, now living in the city, an esteemed, useful member of society. The first newspaper was the "Hamilton Gazette," by FERDINAND A. PARHAM, deceased in 1862. The material for this paper was floated down the Tennessee river in a flat-boat, from Knoxville, and placed in a small log cabin on Walnut st., near cor. Third. This was the year 1837. Politically, the Gazette was a Whig paper.

The pioneers in building up the town were men of stamp and unyielding perseverance. Besides those mentioned, the following were others engaged in the work: Judge R. M. HOOKE, yet living; BENJ. RUSH MONTGOMERY, Col. JAS. A. WHITESIDE, THOS. CRUTCHFIELD, Sr., JOHN COWART, J. W. SMITH, ALLEN KENNEDY, A. S. LENOIR, Dr. S. S. M. DOAK, GEORGE D. FOSTER, R. A. RAMSEY, M. B. PARHAM, J. S. EDWARDS, of whom the latter is living. The town was laid off into lots, in 1838, and sold off in April, 1839. About 250 acres constituted the limits of the new town, which was built near the river, owing to the

trade there. In 1841, the name of "Chattanooga," was given to the place.

THE WHITES

began coming in quite freely this year, and the red man was induced to move on toward the setting of the sun. Now, were it possible for those who in the earlier days of Chattanooga left, ne'er to return, unless in the spirit, to stand upon some eminence and look down upon the scenes presented to the view, what a magic change would they note! The wooded wilds of their native heath has become, lo! a busy, industrious city, with beautiful, wide streets, handsome residences and substantial business houses; its quiet is disturbed by the hum of business. The tall oaks and pines have been felled, and converted into uses of agriculture and manufacture. A town has risen up, as if by enchantment, presenting to their view the evidences of wealth, of commerce, of learning, and the arts.

REMINISCENCES OF EARLY DAYS.

From the early days of Chattanooga as an incorporated town to 1852, when it was honored with the title, "City," no records have been preserved, and consequently the gap is only partially filled: two or three only of those who participated in the honors of the municipal government prior to 1851 are with us, and from those, and other sources we derive the information contained in these pages. In the part of this work devoted to Hamilton County will be found many incidents pertinent to this subject—matters which call for special mention and enlargement.

Market street was hewn out under the supervision of the town commissioners—THOS. CRUTCHFIELD, Sr., having charge of the squad of hardy workmen. At that time, where now may be seen a street railway, business houses, drays and all the busy hum of life, was a vast forest, through which these men waded with axe and pick, felling the huge oaks on right and left, uprooting stumps, and otherwise preparing a way for the future business thoroughfare of what they rightly esteemed the site of a thrifty, large manufacturing point and railroad center.

"THE FUNNEL OF THE UNIVERSE."

This was the favorite expression of Col. B. R. MONTGOMERY, when speaking of the future of Chattanooga. He was known for his clear-headed views, social qualities, and energy. During the progress of work on the street, Col. M., would "mount a stump," in the language of one of our old inhabitants, "and harangue the crowd around him" on this fruitful theme, in which he would indulge in speculations as to the future, all of which has proved

true. In these little talks, others joined, among them Jas. A. WHITESIDE, F. A. PARHAM, JNO. COWART,—all of whom were equally as sanguine. Some of them lived to see only a part of their predictions fulfilled, all lived to see them either brought to completion, or put in process of construction. In this connection we introduce some letters written by Judge R. M. HOOKE, at a time when the Railroad interest was in its infancy, which serve to show the sagacity of the writer whose energy and perseverance, in those days, together with that of his co-laborers and associates has borne its good fruit. It must be borne in mind that Georgia wished to turn the Western and Atlantic R. R. from our very doors to the Tennessee River, via Gunter's Landing, in Alabama. So determined seemed Georgia in this matter, that Messrs. Whiteside, Hooke, Montgomery, McCallie, Boyce, and other of the Railroad magnates of that day determined to send some one to the capital of Georgia, to "lobby" for the extension of the Road to this point. Accordingly, Col. Whiteside, who had been a Senator in the Tennessee Legislature at a time when Georgia was at our feet with petitions for favors at the hands of our generous people, repaired to Milledgeville bearing a simple request for reciprocation. Going to Gov. Crawford, Col. W. laid the matter before him in all its true bearings, and after considerable delay in overcoming the opposition of the Legislature, he accomplished his object. The State of Georgia proceeded with the construction of the Road toward Chattanooga, finishing up to the tunnel; and not having means to cut through began in town finishing to the Ridge, thus making it necessary to wagon freight to the other end of the line south of the Ridge. This was in 1849—the Road advertising to take all freight away; this they could not do, however, as 40,000 bales of cotton alone came in this year from below, on the Tennessee River. But the following are the letters referred to:

CHATTANOOGA, TENN., March 4th, 1845.

Hon. A. O. P. Nicholson:

DEAR SIR.—Although I have not the honor of a personal acquaintance with you, I have taken the liberty of forwarding to your address the Federal Union, of the 25th February, directing your attention to an article on the subject of the "Western and Atlantic Railroad," the completion of which I have always looked upon as an object of the highest consideration, and claiming the deepest interest of every citizen of Tennessee. In works of Internal Improvements, Tennessee stands far in the rear of many of her sister States. We need not seek for the cause of this in the want of intelligence, energy, and enterprise of her citizens, who have so often distinguished themselves in other days; but from the fact, that there exist within herself no points, the connection of which, by means of a railroad, would be either profitable or of any

great public utility. But how would the matter stand should the Western and Atlantic R. R. be finished as contemplated, reaching from a point within our borders to the Atlantic Coast, opening a wide field for the rich products of our industry? It would require no argument then to prove the necessity and expediency of connecting it with some important points within our State. Georgia, perhaps, never thought of building her railroads through her interior until South Carolina's Engineers encamped upon her borders, and signified by signs not to be misunderstood, that they were about constructing a railroad connecting the commercial emporiums of the two States. The very existence of the one produced the necessity and expediency of the other. So with Virginia, North Carolina, and many of the other States, the longer the chain the more profitable and greater the public utility. That the Western & Atlantic Railroad is the most expedient and direct main route which must, at no distant day, connect the cities of the interior of the Great West, must be obvious to every careful and unprejudiced observer, when we turn our eyes to any correct map. Placing ourselves at St. Louis we find Savannah the terminus of the Central Railroad, the nearest point on the Atlantic Coast. Should we then draw a line from St. Louis to Savannah we would find that Chattanooga, Nashville and Smithland would either be covered or shaded by it. Thus we see where nature designed the great thoroughfare should be. Shall Tennessee stand and see it pass her borders on some other more unfavorable route?

As a patron of your excellent paper, and a citizen of Tennessee, feeling a lively interest in everything tending to elevate her standing and enhance her prosperity, must request the publication of the article in the Federal Union to which I have alluded above. In haste, Your ob't servant,

R. M. HOOKE.

LETTER TO HON. J. OVERTON,

CHATTANOOGA, TENN., June 6th, 1845.

Dr. John Overton:

DEAR SIR.—Your favor of 29th ult., was received by due course of mail.

I regret to learn you were unable to find the Laws of Georgia in the Secretary's office. I have, however, procured one from Col. Whiteside, of this place, which he had the kindness to offer me for your use, which I have enveloped, etc., and put in the charge of the stage driver from this place, directed to you at Nashville, care Postmaster, which I hope you may receive in due time. You will find in it all the different Charters of the State of Georgia, Amendments, &c.

I have also taken the liberty of enclosing with the above books, Niles' Register, of 17th May, '45, in which you will find much general information relative to railroads, both in the United States and England, their original cost, the present value of their stock, all of which are collated from the Railroad Journal and may be relied upon as correct in every particular.

The Legislature of Georgia in passing the law to work the convicts in the Penitentiary on the railroads, had in view an unfinished portion of the State work, about 25 miles South of this place, known as the Tunnel. By making a tunnel thirteen hundred feet it would shorten the line three miles. The gover-

nor, however, who had the control of the work, thought it the most expedient; since the appropriation was insufficient to finish the whole to progress with the work just so far as they had means to finish it, and not to finish the whole simultaneously, as had been the policy heretofore adopted. The propriety of the measure was therefore never tested, that portion of the road which is now in progress, requiring mechanical skill to finish it. The cost of the grading and masonry of railroads compared with the entire cost, varies very much in different countries. Such a country as the North Carolina Railroad runs through, the grading and masonry are very light, while on the Georgia and other roads, and such as ours would be from here to Nashville, would be over three-fourths of the whole cost.

The distance from Chattanooga via the railroad to the Georgia line is about 16 miles. In a western direction the State of Georgia approaches within $3\frac{1}{2}$ miles.

The grading and masonry on the Western & Atlantic Railroad are much better executed than any I have ever seen in the United States. Enough money has already been expended on it to have put the cars on the whole line. They have made a double track when a single one was sufficient, the masonry too fine, too costly. My opinion about the construction of a road is, that it be done on the cheapest, substantial plan, without any useless show of architecture or masonry. Private Stock Companies always build a road cheaper than and better than States. When a State work is undertaken no economy is used, but useless extravagance. Hence they have become deservedly unpopular. From the best information I have the people are opposed to the State taking much, if any, Stock in railroads. The explosion of the Hiwassee Railroad Company has prejudiced many against such a policy. Yet I think if a favorable Charter could be obtained that the Stock would be taken by private individuals. On the Georgia Railroad the Stockholders themselves, with their hands have done most of the work, expending money only for such portions of the work as required mechanical skill.

The Georgia Railroad Company, as you will discover, have banking privilege, and have always sustained their institution in credit. So also the Central Railroad and Banking Company.

When I receive the information and documents from the South, you will hear from me again.

Respectfully, Your ob't servant,

R. M. HOOKE.

N. B.—I send Niles' Register above alluded to, thinking probably you might not take it, or be enabled to get it conveniently.

H.

ANOTHER OLD DOCUMENT :

The following letter was written in 1845, the succeeding year, by Col. B. R. MONTGOMERY, who was also interested in the Railroad movement of those days. The letter speaks for itself, and is the more interesting as serving to throw additional light on the absorbing topic of the day. Chattanooga may not be exactly the "funnel of the Universe," but she is the "Key City" of the South:

"GAZETTE—*Extra*.

'Chattanooga, March 23, 1849.

"After our paper of this week was struck off, we received the following copy of a Letter addressed to the Editor of the McMinnville Gazette, and by request, issue it in extra:

"CHATTANOOGA, March 20th, 1846.

"John W. Ford, *Esg.*

"SIR: About four years since, I considered that the time had arrived to commence the development of a grand system or scheme of Internal Improvements, which I had formed many years previous to that time, the accomplishment of which I deemed of immense importance to our State. The greatest feature in it was the continuation of the Atlantic line of Railroads in such a manner as to accommodate all sections of the State, either by putting them in direct contact with the main stem, or by so locating it that by branch Roads and Rivers, all could have a free and favorable connexion with it. I accordingly, in the spring of 1845, commenced more active operations for the purpose of securing the speedy construction of a Railroad from the western terminus of the Georgia line of Railroads at Chattanooga to Nashville, on the Cumberland river, and have constantly pressed that great enterprise until the country can confidently rely upon its speedy completion. The benefits of my great system thus partially unfolded and projected, are already visible in the greatly enhanced value of real estate contiguous to the line of the Road, and which will be yet quadrupled by its completion, and will, in a very short time display in meridian splendor the benefits that will result by its final completion. The forwardness of this work, which will be pressed with energy and decision, promptitude and vigilance, renders it expedient that active and efficient measures be taken and now adopted, for the speedy accomplishment of the remainder of the system. While my most particular attention has been directed to the Nashville Road as being the corner stone of the system, I have not failed to bring forward and fix upon the public mind the importance of a Railroad extension East from Knoxville to the Virginia line, and West from Nashville to the Mississippi river. These lines, as well as the Nashville line, I projected. They have been chartered, and a commendable public spirit looking to their construction has already been manifested by the citizens of the country through which they pass. These lines, with the completion of the Hiwassee Road, form the grand outline of the scheme to be perfected and carried out, by diverging and separate branches from the Chattanooga and Mississippi Road, North to McMinnville and to the State line in the direction of Louisville, and South to Huntsville, to Shelbyville, to Columbia, and to North Mississippi in the direction of Mobile and New Orleans. The Western terminus on the Mississippi river, to be located with the view to a direct connection with the great California road, should the point of commencement of that road not be made in the interior of our own State, where it doubtless

should be. The Hiwassee and Virginia Roads through the valley of East Tennessee, in connection with the Nashville and Mississippi Road, with the branches before indicated, and such others as may be needed to complete the system of Railroads, when built, will add untold millions to the wealth of our State in the increased value of its lands and productions—the active development of its present dormant, but inexhaustible, mineral and manufacturing resources, and will greatly augment its political and moral influence by the increase and refinement of its population. To complete this system and scheme, the powerful influence and all-sufficient aid of the State is indispensable—it must be had to the extent of four or five millions of dollars, and it can be extended thus far without endangering its credit and character. I am out of all patience with our leading politicians of all parties, who content themselves with considering and discussing dry political abstractions to the utter neglect of all the great local interests directly affecting the permanent welfare, the true honor and glory of our State; and in order to do what I can to correct the practice, and to bring up this great interest of our State to the consideration of the people, I present myself as a candidate for Governor of the State at the next election, and shall take an early occasion to lay before the people an exposition of the details and advantages of my favorite policy.

“B. R. MONTGOMERY.”

The above was taken from the Chattanooga Gazette Extra, the original of which we have before us, and it is given word for word as it appears. Many incidents of the earlier days of Chattanooga and surrounding country have come to the writer in various ways—having traveled over much of the contiguous country, he has met some of those who were in some way connected, or familiar with, the infant days of the place, whose narratives are full of interest and wild adventure; but the narrow limits of this book will not admit of their production here.

CHRONOLOGICAL.

1835.--Treaty with the Indians concluded, and whites take possession of that portion of Hamilton County south of Tennessee River (Ross' Landing.)

1836.--Arrival of more whites, among whom were, Jno. P. Long, A. M. Rawlings, Wm. M. Davis, Dr. Nath. Harris, John Keeney, D. A. Wylds, R. A. Ramsey, and others.

1837.--U. S. Troops began coming in, and preparations are made for the removal of the Indians to their reservations; first Postoffice established.

1838.--Name of “Chattanooga” given to the place; The “Hamilton Gazette” established by F. A. Parham; Judge R. M. Hooke appointed by the President, Martin Van Buren, to remove Indians to their reservations.

1839.--Act of General Assembly incorporating Chattanooga; the first Steamboat—“Sam Martin,” George Nicholson, master, arrives from Ohio river; owned by R. M. Hooke, Thos. McCallie, Ben. Chandler and others.

1840.--Election for Board of Mayor and Aldermen, January 24; James

Berry elected Mayor of the town.

1841--Dr. Beriah Frazier elected Mayor.

1842--Dr. Milo Smith elected Mayor.

1843-4-5-6-7-8-9-50-1--These years were filled in by Drs. Smith, and Joe S. Gillespie, and perhaps one or two others, whose names cannot be arrived at owing to the loss of records.

BOARDS OF MAYOR AND ALDERMEN.

1852.

MAYOR.

MILO SMITH.

ALDERMEN:

FIRST WARD.

Larkin Hair, M. B. Parham,

THIRD WARD.

Robert Cravens, William Crutchfield, D. C. McMillin, John A. Hooke,

SECOND WARD.

John P. Long, J. J. Bryan,

FOURTH WARD.

1853.

MAYOR.

H. W. MASSENGALE.

ALDERMEN:

H. V. Abrams, M. B. Parham,

J. J. Bryan, Wm. Williams,

B. R. Montgomery, Robt. B. Nelson,

James Baker, H. B. Pope.

1854.

MAYOR:

W. WILLIAMS.

ALDERMEN:

M. B. Parham, H. S. Abrams.

John W. White, Jos. S. Gillespie,

John L. Hopkins, C. E. Grenville,

W. F. Ragsdale, Wm. Crutchfield.

1855.

MAYOR:

E. G. PEARL.

ALDERMEN:

W. F. Ragsdale, James A. Whiteside,

O. H. P. Wayne, J. H. Alexander,

J. J. James, Wm. Smith.

Sam'l. W. Thomas, Jas. C. Warner,

1856.

MAYOR:

D. C. McMILLIN.

ALDERMEN:

James S. Edwards, Chas. Burns,

James Kelley, Thos. J. Lattner,

W. E. Kennedy, A. T. Carroll,

Jas. C. Warner, A. H. Johnson,

1857.

MAYOR:

W. D. FULLTON.

BOARDS OF M. & A. (Continued.)

ALDERMEN:

R. B. Brabson, Jno. P. Hodges, J. W. White, W. S. Bell,
John Lowry, W. F. Ragsdale, Peter Lewis, A. D. Taylor.

1858.

MAYOR:

W. S. BELL.

ALDERMEN:

John L. Hopkins, James S. Edwards, V. Q. Johnson, Jno. W. White,
Sam'l. McCamy, J. W. Rice, J. C. Warner, Jno. L. Hopkins.

1859.

MAYOR:

THOS. CRUTCHFIELD, SR.

ALDERMEN:

Jas. S. Edwards, Robert. L. Hooke, W. S. Bell, V. Q. Johnson,
Benjamin Chandler, Thomas Webster, Peter E. Lewis.

1860

MAYOR:

CHAS. E. GRENVILLE.

ALDERMEN:

Moses Wells, T. J. Lattner, W. L. Dugger, D. Herrington,
R. M. Tankesly, Christopher Cornish, Daniel Hogan, T. T. Hood.

1861.

MAYOR:

J. C. WARNER.

ALDERMEN:

Jas. S. Edwards, R. Henderson W. L. Dugger, D. Herrington,
Jesse Thompson, Foster Whiteside, Thos. Webster, Jacob Kunz.

1862

MAYOR:

MILo SMITH.

ALDERMEN:

R. Henderson, John Mitchell, D. Herrington, W. L. Dugger,
Sam'l. R. McCamy, Foster Whiteside, D. Kaylor, Thos. Webster.

1863.

MAYOR:

MILo SMITH.

ALDERMEN:

Richard Henderson, John Mitchell, W. L. Dugger, John S. Brewer,
David P. Swick, J. R. Allison, Daniel Kaylor, J. R. Taylor.

The occupation of the city by the Federal Army in September, 1863, interrupted the civil government until October, 1865, when the following Board was

elected, and civil government re-instated:

1865.

MAYOR:

RICHARD HENDERSON.

ALDERMEN:

A. Bohr, A. Kesterson,
Wm. Crutchfield, T. R. Stanley,

J. Mann, J. DeBeck,
Jacob Kunz, D. Hogan.

1866.

MAYOR:

CHAS. E. LEWIS.

ALDERMEN:

A. Bohr, A. Kesterson,
Wm. Crutchfield, H. N. Snyder,

Wm. Franklin, W. L. Dugger,
J. Kunz, Dan. Hogan.

1867.

MAYOR:

D. C. CARR.

ALDERMEN:

Xen. Wheeler, E. S. Richards,
John W. James, J. B. Spitzer,

T. G. Montague, A. Handman,
D. B. Carlin, C. C. Seigfried.

1868.

MAYOR:

D. C. CARR.

ALDERMEN:

James Pearson, Wm. Wylde,
T. J. Carlile, John Maloney,

P. Karstein, A. H. Green,
P. McGuire, C. P. Letcher.

1869.

MAYOR:

A. G. SHARPE.

ALDERMEN:

Wm. Wylde, D. C. Trewhitt,
R. L. Bowdre, Wm. Miller,

T. K. Wornacut, W. L. Dugger,
Miles Shields, Andy Warren.

1870.

MAYOR:

W. P. RATHBURN.

ALDERMEN:

T. J. Lattner, Moses Wells,
Wm. Miller, D. T. Clippinger,

D. M. Key, E. M. Wight,
[J. F. Loomis, vice Key resigned.
Thos. Webster, Fred F. Weihl.

1871.

MAYOR:

W. P. RATHBURN.

CHARTER OF THE CITY OF CHATTANOOGA.

SECTION 1. *Be it enacted by the General Assembly of the State of Tennessee:* That the inhabitants of the City of Chattanooga, in the county of Hamilton, are hereby constituted a corporation and body politic, by the name and style of the Mayor and Aldermen of the City of Chattanooga, and by the same, shall have succession for ninety-nine years, may sue and be sued, plead and be pleaded in all the courts of law and equity and in all actions whatsoever. May purchase, receive and hold property real and personal within said city, and may sell, lease or dispose of the same for the benefit of said city, and may purchase, receive and hold property real and personal within said city, and may sell, lease or dispose of the same for the benefit of said city, and may purchase, receive and hold property real and personal beyond the limits of the city, to be used for the burial of the dead, for the erection of water works, for the establishment of a hospital, poor house, work house, or house of correction, and may sell, lease or dispose of said property for the benefit of the city, and do all other acts touching the same as natural persons, and shall have a common seal and change it at pleasure.

SEC. 2. The boundary of the city shall be as follows: Beginning at a point on the Tennessee river where the north line of the southeast fractional quarter of fractional section twenty-one, in the second fractional township west of the basis line in the Ocoee District strikes the said river, thence south 70° east to the northeast corner of said quarter section; thence south 20° west to the township line dividing the second and third townships; thence north 70° west along said township line to the middle of said river; thence up the middle of said river to a point opposite the beginning; thence in a direct line to the beginning.

SEC. 3. *Be it further enacted,* That the act passed February 12th, 1869, entitled an act to "incorporate the Raleigh and Mineral Spring Hotel Company" be and the same is hereby amended so as to change the line of the corporate limits of the city of Chattanooga, Tennessee; commencing at a point in the center of the Tennessee river opposite the corner of the Lendsey and George Gardenhire tracts of land, on the south bank of said river and running with said line between said lands to a point where it strikes the citizens cemetery, thence along the line of said cemetery on the side next to the river to the Jewish cemetery; thence in the same direction in a straight line to the "right of way" of the East Tennessee and Georgia Railroad Company; thence in a northeast direction along the north side of said "right of way" to the present line of said incorporation.

SEC. 4. There shall be a Board of Mayor and Aldermen to consist of two members from each ward, chosen by the qualified voters of each ward respectively, for one year. No person shall be an Alderman unless he be a citizen of the State of Tennessee, and a bona fide resident and freeholder in the ward for which he is elected at the time of his election. Any Alderman after his election, removing from or ceasing to be a freeholder in his ward, shall thereby vacate his said office. Each Alderman shall, before entering upon the duties of his office, take an oath, that he will faithfully demean himself in said office. All vacancies in the Board of Aldermen shall be filled by the vote of a majority of the remaining members.

SEC. 5. The Mayor shall be elected by the qualified voters of the city, and shall hold his office for one year, and until his successor shall be elected and qualified. No person shall be elected Mayor who is not at the time of his election, a citizen of the State of Tennessee, and a bona fide resident and freeholder of said city. When two or more persons shall have an equal number of votes for the office of Mayor, the election shall be decided by a majority of the votes of the Council elect. A vacancy in the office of Mayor shall be filled in the same manner. The Mayor may fill all vacancies occurring in any office except that of Alderman, until the same be filled by an election.

It shall be the duty of the Mayor to preside at all meetings of the Council; to take care that all the ordinances of the city are duly enforced, respected and observed, within the city; to take an oath of office before he enters upon the duties of the same; and to call special sessions of the Board.

SEC. 6. The Mayor and Aldermen shall appoint a Recorder and define his duties, and shall have full power and authority to appoint all officers, servants and agents of the corporation to fill such offices as they may deem necessary to create by ordinance, and shall fix the compensation of such officers. They shall have power (a majority of the whole Board concurring) to dismiss any officer, servants or agent by them appointed.

SEC. 7. *Be it further enacted*, The Board of Mayor and Aldermen of said city may at any time lay off new wards and adjust or change existing ones, always giving at least twenty days' notice of such change before any annual election for Aldermen.

SEC. 8. An annual election for Mayor and Aldermen shall be held in each ward of said city by the Judges of Election appointed by the existing Board of Mayor and Aldermen of said city; *Provided*, that the first election after the passage of this act shall be held by the Sheriff of Hamilton county, on the third Thurs-

day in November.

The voters shall vote by ballot, and only in the wards in which they may reside. Non-resident freeholders may vote in the ward where their freehold is situated, and not elsewhere.

These Judges of Election, being freeholders in their respective wards, shall be appointed by the Mayor and Aldermen for each ward, who shall take an oath to faithfully and impartially discharge their duties, naming also the places where such election shall be held. They shall open the polls at nine o'clock in the forenoon, and close them at four o'clock in the afternoon; when they shall forthwith proceed to ascertain, and certify to the existing Mayor, the result of said election. All persons owning a freehold in said city, and all persons resident therein who would be qualified to vote for members of the General Assembly, shall be qualified to vote at such election.

In all cases of a tie in the election of an Alderman, the election shall be referred back by the Mayor to the voters of the ward.

The Mayor and Aldermen elect shall meet on the first Monday after the third Thursday in November, in each year, and be qualified and enter upon the discharge of their duties; two-thirds of the whole number of Aldermen elect being a quorum competent to transact business.

SEC. 9. The Mayor and Aldermen shall have power by ordinance within the city:

1st. To levy and collect taxes upon all property taxable by law for State purposes.

2d. To levy and collect taxes upon all privileges and polls taxable by the laws of the State.

3d. To appropriate money and provide for the payment of all debts and expenses of the city.

4th. To make regulations to prevent the introduction of contagious diseases in the city; to make quarantine laws for the purpose, and enforce the same within the corporate limits of the city.

5th. To establish Hospitals, and make regulations for the government thereof.

6th. To establish a system of free and other schools, and to regulate the same.

7th. To make regulations to secure the general health of the inhabitants, and to prevent and remove nuisances.

8th. To provide the city with water by water-works, or otherwise, within or beyond the boundaries of the city.

9th. To open, alter, abolish, widen, extend, establish, grade,

pave, or otherwise improve, clean and keep in repair streets, alleys and sidewalks, or to have the same done.

10th. To erect, establish and keep in repair bridges, culverts, sewers and gutters.

11th. To provide for lighting the streets and public buildings.

12th. To establish, support and regulate watchmen by day and by night.

13th. To erect Market-houses, establish markets, and regulate the same.

14th. To provide for the erection of all buildings necessary for the use of the city.

15th. To provide for enclosing, improving and regulating all public grounds belonging to the city, in or out of the corporate limits.

16th. To erect and repair public wharves and regulate all wharves, docks and buildings, and to fix the rate of wharfage thereat, and to regulate ferries so as not to conflict with the laws of Tennessee.

17th. To restrain and prohibit gaming.

18. To license, tax and regulate auctioneers, grocers, merchants, retailers, taverns, brokers, bank agenies, coffee-houses, confectioneries, retailers of liquors, hawkers, peddlers, ten-pin alleys, billiard table and livery-stable keepers.

19th. To license, tax and regulate hackney carriages, omnibuses, wagons and drays, and fix the rate to be charged for the carriage of persons and property within the city and to the public works without the limits of the city.

20th. To license and regulate porters and fix the rate of portage.

21st. To license, tax and regulate theatricals, and other exhibitions, shows and amusements.

22d. To prevent and suppress all disorderly houses and bawdy houses.

23d. To provide for the prevention and extinguishment of fire to organize and establish fire companies; to regulate, restrain and prohibit the erection of wooden buildings in any part of the city; to regulate and prevent the carrying on of manufactories dangerous in causing or producing fires.

24th. To regulate the storage of gun-powder, tar pitch, rosin, saltpeter, gun cotton, and all other combustible materials, and the use of lights, candles and stove-pipes in stables, shops and other places.

25th. To establish standard weights and measures and regulate the weights and measures to be used in the city, in all cases not otherwise provided for by law.

26th. To provide and establish necessary inspectors for the city.

27th. To regulate the police of the city ; to impose fines, forfeitures and penalties for the breach of any ordinance, and to provide for their recovery and appropriation ; to appoint an officer, or officers, for the city, being a Justice of the Peace, or Recorder, before whom such recovery may be had—not, however, to include the jurisdiction of other Justices of the Peace in said city.

28th. To provide for the arrest and confinement until trial of all rioters and disorderly persons within the city by day or by night ; to authorize the arrest and detention of all suspicious persons found violating any ordinance of the city.

29th. To prevent and punish by pecuniary penalties all breaches of the peace, noise, disturbances, Sabbath breaking, or disorderly assemblies in any street, house, or place, in the city, by day or by night.

30th. To remove all obstructions from the sidewalks, and to provide for the construction and repair of all sidewalks, and for the clearing of the same, at the expense of the owners of the ground fronting thereto or otherwise.

31st. To pass all ordinances not contrary to the Constitution and laws of the State that may be necessary to carry out the full intent and meaning of this act, and to accomplish the object of their incorporation.

SEC. 10. When lands and town lots have been assessed for city taxes and they remain due and unpaid, and the owners have no goods and chattels within the city, from which distraint can be made, the same may be reported to the Law Court of Chattanooga, for condemnation and sale by the city tax collector, who is hereby invested with the same authority in the premises, that the State and County tax collectors have in the collection of the State and county taxes.

SEC. 11. The Recorder of the city of Chattanooga be, and he is hereby invested with concurrent jurisdiction with Justices of the Peace in all cases of violation of the criminal laws of the State, or of the ordinances of the Mayor and Aldermen of the city of Chattanooga, within the limits of said city.

SEC. 12. That the Mayor and Aldermen of the city of Chattanooga shall have power to erect a work-house and lock-up, or calaboose, for the safe keeping of all persons: and when any persons convicted of a violation of any ordinance of said corporation and refuses to pay or secure to be paid, the fine and cost accruing thereon, the Mayor and Aldermen may provide by ordinance for their confinement in said lock-up or work-house, and put them to work for the city, either within an enclosure or on the streets, and other public works for the city, under proper guard, at such wages as the Board may adopt by ordinance, until such fine and costs are paid.

SEC. 13. That the territory included in the boundary of the city of Chattanooga as defined in the second section of this act, shall be, and constitute a civil district of Hamilton county, and shall be entitled to elect three Justices of the Peace.

SEC. 14. That the city Marshal and regularly constituted watchmen of said city shall have power to execute State warrants, and other process, which constables generally have power to execute within the limits of the corporation.

SEC. 15. That the corporation of Chattanooga shall have full power to borrow money on its bonds, for any object that its authorities may determine to be important to the promotion of its welfare, and that is not made improper by existing law. *Provided*, that the sum borrowed, under the provisions of this section shall not exceed the sum of fifty thousand dollars without being specially authorized so to do by a majority of the qualified voters of said city, expressed by an election to be held for that purpose; and, *Provided further*, that said bonds shall not bear a higher interest than six per cent. per annum, and that nothing herein contained shall be construed as conferring on said corporation a power to issue paper that shall circulate as money.

SEC. 16. All ordinances and regulations heretofore enacted by the Mayor and Aldermen of the city of Chattanooga, and not rescinded by them, shall be, and remain in full force until altered, modified, or repealed under this act.

SEC. 17. That the City Marshal shall be elected by the qualified voters of the city of Chattanooga at the same time the Board of Mayor and Aldermen are elected; and that he shall be voted for in each Ward as the Mayor is voted for; and he shall give such bond and securities for the performance of his duties as the Board of Mayor and Aldermen may require.

SEC. 18. That all acts and parts of acts contrary to, and inconsistent with the provisions of this act be, and the same are hereby repealed.

SEC. 19. That this act shall take effect from and after its passage.

W. O'. N. PERKINS,

Speaker House Representatives.

D. B. THOMAS,

Speaker of the Senate.

THE FIRE DEPARTMENT.

Of all the institutions which we boast, none should be encouraged and fostered more than the Fire Department of a city. Although but of recent inauguration, the Fire Department of this city has made rapid strides toward efficiency, and have done a large amount of good for the community. No set of men should be more highly rewarded by the people than firemen. They risk their lives, they injure health, at times, leave their houses at the dead hour of midnight to answer the summons of the fire bell. To them we are indebted for the preservation, partially at least, of our houses and frequently our lives. When the few citizens who met together one night after the disastrous fire of '70, with TOMLINSON FORT as chairman, determined to organize a fire department, against fearful odds and with no funds, they found a ready spirit of the people to assist. But by degrees the interest began to lag, and those who had undertaken it had to contend against this. To-day they have the entire thanks of the people for what they have accomplished. It is to be hoped the city will not fail to give due considerations to this most important organization.

The following is interesting as showing the organization and progress and the work done by the fire department in this city:

Organized in February, 1871—No record of fires kept until 1873.	
In 1873, there were 6 fires.....	Total losses \$ 7,384.....
In 1874, " " 18 "	Insurance " 1,510
In 1875, " " 20 "	" 33,900
In 1876, " " 18 "	" 11,855
From Jan. 1 to June 1, '76.]—	—
TOTAL.....	\$78,579.....
	\$51,349

FIRE APPARATUS.

1 Steamer, 2d class.....	\$ 5,000
2 Hose Reels..	400
1 Hook and Ladder Truck.....	850
900 feet Hose.....	450
TOTAL VALUE PROPERTY.....	\$ 6,700

OFFICERS, MEN, ETC.

Chief Engineer—HARRY WILCOX; Assistants, HARRY MCQUADE, WM. FRIEDMAN. Foremen—Wm. Horan, Thos. Wilcox, Frank Delay, Joe Hutson.

Foreman Hook and Ladder Co. (col'd.)—CHARLEY WALKER.

No men in Steam Fire Co., including officers.....	20
No men in each Hose Co., 20 " "	40
No men in Hook & L Co. " "	36
TOTAL MEN.....	96

THE ROLLING MILL FIRE COMPANY.

1 Hose Carriage, 500 ft. 3-ply Hose at Engine House, and 500 ft. in the Mill. Two Fire Engines, (stationery) on either side of the Mill, under one of which is a boiler, to be used in case of emergency. Reservoir 200 feet high, from which plugs in Mill will be supplied, obviating the use of the engines.

It may be proper to state here that this is a very efficient fire department, and although organized among the employees, is yet subject to the City Fire Department, when on duty.

We should like to mention in this connection some instances, in which our Fire Department distinguished itself; but owing to limited space must forego the otherwise pleasurable duty, except to speak of the burning of the Lookout Flouring Mills, in 1875. At this time the water was all over the fire plugs, and yet the firemen worked manfully with the apparatus in the vain endeavor to save the property. This instance alone speaks volumes for the Fire Department of Chattanooga.

REAL ESTATE AND RENTS.

Within the limits of the city, and on the suburbs, are hundreds of delightful sites for residences and manufactories. Railroads enter it on all sides, thus giving to manufactories the benefit of switches from their works to the main lines. Along the river front, extending considerably over a mile around the city, are very fine sites for other enterprizes than those now occupied by the rolling mills, saw mills, blast furnaces, tanneries, &c. While to the southeast of the city are several creeks with water power suitable for numerous enterprizes.

Rents are comparatively low for residences and business houses—the days of fancy prices having gone with the temporary excitement which produced them during the scarcity of houses, in Chattanooga, some few years since. True, there are some instances of individual fogyism in which we see unreasonable prices demanded for eligible sites. They are few, however.

Ordinary dwellings of five or six rooms are \$8 to \$15. A very good dwelling, with all modern improvements, large and comfortable, may be had for \$20 to \$25. But it must be noted here that there are few houses in the city to rent—consequently an investment in this way would pay handsomely.

Good store rooms may be had at from \$400 to \$600; while larger and better rooms command from \$800 to \$1,200 per annum. Of store-houses, also, there are not enough—another good investment.

LOCATION.

Chattanooga is situated in latitude $35^{\circ} 4'$, longitude $85^{\circ} 20'$ west of Greenwich. It is built partly on a level plain on the south boundary of the city; while on the east and west are hills on either side, between which lies the principal business part of the city. The Tennessee river is the northern boundary. On the east, extending in a southwesterly direction, about $2\frac{1}{2}$ miles from the city, is the "Missionary Ridge," at an elevation of some 700 feet. A rich valley of 3 miles width divides this ridge from Lokoout Mountain. On the southwest side of the river is the Raccoon Mountain and as a continuation of this Walden's Ridge, on the northwest side of the river.

For fruit growing and the raising of esculents, these hills and mountains are unsurpassed. The grape is grown with wonderful success. (A subsequent chapter is devoted to a comprehensive treatise on grape culture:) Apples (the finest quality) and peaches (good yield) pears, etc. are raised to fine advantage. This branch of industrial pursuits is very much neglected. The land for fruit growing can be bought for \$1 to \$5 per acre, within from 2 to 5 miles from the city.

GEOGRAPHICAL POSITION.

Lying in the center of the basin made by the Tennessee Valley on the north, flanked on the west by Walden's Ridge; the great Valley of East Tennessee on the east / Chicamauga and Chattanooga Valleys on the south; and Lookout Valley on the west; while the Sequachee Valley is on the northwest, tending to and drawing from the great stock state, Kentucky—all pouring supplies into her spacious lap, Chattanooga offers superior inducements as a grand Entrepot and reshipping point.

CLIMATE AND TEMPERATURE.

The situation of Chattanooga geographically renders the climate of a very equable and moderate temperature. No great extremes of heat or cold distress, nor are very sudden changes experienced. True, there are changes as in every climate. The thermometer ranges between 28° and 94° , seldom reaching either extreme. Snows very seldom occur, and they not over the depth of a few inches. In the summer months, no matter how warm throughout the day, in the evening a gentle breeze springs up to soothe the woer of "Nature's sweet restorer, sleep." Situated in a sort of basin, hemmed in on all sides by mountains and hills, such a thing as a hurricane or storm is unknown in Chattanooga. The air on these ridges is pure and invigorating,

water plentiful and grazing fine. In another part of this book will be found a treatise on the Table Lands, by an eminent physician of this city, which is apropos to this subject.

MORTUARY STATISTICS.

The healthfulness of Chattanooga may be safely put down as good. The elevation of the place, the surrounding hills, and the rapid streams coursing through and around it; together with the natural drainage, which requires but little work on the streets to cause the dirt and rubbish accumulating to be carried off to the river, makes Chattanooga a very healthy place. Without going into details, the following figures from the official reports of Dr. J. H. Vandeman, Registrar of Vital Statistics of the city, speak for themselves. The report is for the year ending August, 1875, and includes *all who have died* in the city, whether non-residents or residents.

First ward—white 21, colored 26; second ward—white 22, colored 20; third ward—white 27, colored 32; fourth ward—white 34, colored 29; fifth ward—white 20, colored 25; from country—white 7, colored 1; total in city—white 126, colored 143 = 269. The population of the city is 11,000—of which 6,500 are white, 4,500 colored. The percentage of deaths would be, therefore, 19.3 white, 31.8 colored.

The City Hospital is located in the 1st ward, and there were white 2, colored 9, deaths in this institution, included in the above report.

The remarkably pure air on the elevations of the city is very favorable to the healthfulness of residents. In the summer it is hardly ever necessary for even invalids to leave the city, so pleasant is it. And if it becomes necessary in some instances, they have within easy reach mountains, ridges and hills on every hand—principal of which is Lookout Mountain and Walden's Ridge.

RIVER TRANSPORTATION --- TENNESSEE RIVER TRADE AND IMPROVEMENTS.

The Tennessee River from its longest confluent to the mouth of the Ohio, at Paducah, Ky., is 1100 miles in length. This is the largest tributary of the Ohio, and so far as volume of water and length are concerned, says Killebrew's Resources of Tennessee, it is as much entitled to be called the main stream as the Ohio. It is, in many respects, a remarkable stream. It drains an area of 41,000 square miles. Its fall within that distance is 2,000 feet, and its average width 1,500 feet. Rising in the south-west portion of Virginia, and bearing the name of Holston until its union with the Clinch, near Kingston, in Roane county, it sweeps down the Valley of East Tennessee in a rapid current until

it passes Chattanooga, a short distance below which it breaks through Wal- den's Ridge in tumultuous whirls, by a series of bends, into the Sequatchie valley, where the current grows less turbulent, flowing quietly down this valley for a distance of sixty miles, and at Guntersville, Alabama, takes a direction nearly west by north. Between Lawrence and Lauderdale counties, in Alabama, 339 miles below Knoxville, it spreads in a broad, shallow expansion called Muscle Shoals, flowing over flint and limestone rocks for twenty miles, forming an almost insurmountable barrier to navigation, yet affording the very finest water privileges. On the Mississippi line, at Chickasaw, it turns north-west, and forms the boundary line between Alabama and Mississippi; and after a circuit of 300 miles in Alabama, re-enters Tennessee, flowing north, and emptying into the Ohio River at Paducah, Ky., 800 miles from the union of the Clinch and Holston rivers.

Regarding the Holston as the Tennessee, its principal tributaries from the north are the Clinch, Sequatchie, Paint Rock, Flint, Elk and Duck rivers, and Shoal and other creeks; from the south the Watanga, French Broad, Little Tennessee, and Hiwassee, and Big Sandy from the west. Many of these tributaries, especially the Clinch, French Broad and Hiwassee, are navigable for considerable distances, and during the spring freshets, large quantities of produce are transported down these streams on flat and keel boats to Chattanooga.

IMPROVEMENTS BY GOVERNMENT.

As early as 1828, the Board of Internal Improvement was directed by an act of Congress, to make an examination of the Muscle Shoals, with a view to opening them to navigation. After a lapse of forty-five years, but little having been done in the inception of the scheme, it is proposed by Government to finish up the work so auspiciously begun and abruptly abandoned, by putting the old canal in good condition, constructing canals, etc.

The following items taken from the Resources of Tennessee, and such other information as we have at our hands from various other sources, will give a very fair idea of what has been done, and the work in hand, etc., etc.:

APPROPRIATIONS BY CONGRESS:

Amount for river above Muscle Shoals.....	\$180,000
" " at Muscle Shoals.....	50,000
" " below Muscle Shoals.....	80,000
	310,000
Congress appropriated in March, 1875, (H. R. 4740).....	200,000
Total.....	\$510,000

An appropriation of \$300,000 more has been made, awaiting only the approval of the President to become a law; thus making the total appropriations, for improvement of the Tennessee River, **\$810,000.**

The following are the necessary improvements, with cost, at the three points named, as estimated by Maj. McFarland, in 1873:

ELK RIVER SHOALS:

Total necessary improvements.....	\$740,000
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Amount brought forward.....	\$ 740,000
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BIG MUSCLE SHOALS.

Total necessary improvements.....	639,000
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LITTLE MUSCLE SHOALS.

Total necessary improvements.....	565,000
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	1,935,000
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Contingencies, to provide against leakage, accidents, construction of ooffer-dams, etc, 10 per cent.....	193,500
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Aggregate cost.....	\$2,128,500
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It is estimated that the entire cost of River Improvement will be, according to the plans adopted, from three to four million dollars. On the upper improvements two are complete—those at White's Creek and at the head of Half Moon Island.

Immediately below Chattanooga are a series of shoals known as the mountain obstructions, and by the names of Ross Tow-head, Tumbling Shoals, Suck, Pot, Skillet, and several others. The most formidable was the Suck. A large amount of work has been done at that place. As this mountain portion of the river will not be used to any extent for commercial purposes until the lower river is open to navigation, no immediate importance is attached to the improvement of these mountain obstructions. The policy of the United States engineer officers in charge of this improvement, is to do work which will benefit commerce immediately, and as the appropriations of Congress become more liberal, a general improvement of the river will be undertaken.

THE TENNESSEE RIVER TRADE.

It is impossible to arrive at anything like an exact estimate of this important branch of our trade; but taking the shipments made by our dealers, the following figures show the business for the year past, as to articles mentioned:

Corn, bushels.....	1,200,000	Value.....	\$ 720,000.
Oats, bushels.....	50,000	.....	25,000
Wheat, bushels.....	100,000	.....	100,000
Bacon and Lard, pounds..	1,500,000	.....	121,000
Hay, pounds.....	900,000	.....	11,250
Flour, barrels.....	1,500	.....	10,500
Pig Iron, tons.....	50,000	.....
Saw Logs.....	10,000	.....	20,000
Butter, Eggs, Dried Fruit, &c, estimated at about the value of above, making a grand total of.....			\$3,815,500.

Six steamboats ply annually in the up river trade, as far up as Knoxville, confining their business, however, mostly to points between that place and Chattanooga. Some two hundred flat-boats annually come out of the French Broad, Clinch, Hiwassee, and other tributaries of the Tennessee, landing at our wharf Potatoes, Cabbages, Apples, Cider, Maple Sugar, &c., &c. When the obstructions to navigation are removed at points above, the trade will materially increase. The lower River trade is rather limited; but the removal of obstructions by Government will open up navigation to the great Mississippi Valley.

EDUCATIONAL INSTITUTIONS—OUR PUBLIC SCHOOL SYSTEM.

Among the many matters of great importance to our community, none should be fostered more than the Educational Institutions. Given good schools, fine attendance and the right sort of instruction and you will have a progressive, moral and thrifty people. It is to the schools we look for the training of the young in all the manly arts and moral ways. No matter whether religion is taught there; no matter if the much-abused Bible is excluded from the school room, there is yet a moral air pervading it, which develops itself into good men and women, when the education has been only sufficient to lift the boy and girl from comparative ignorance and darkness into the light of an educated day.

The efforts made by a few interested men and women of this community to establish and foster the building up of schools here, is meeting with a success which can not be lightly measured. We speak more particularly of our Public Schools, of which we shall give some data on another page. But the private enterprises are entitled to some degree of praise. It is no easy matter to sustain a school in the face of those grand institutions of instruction, Public Schools. This has been done, however, so far, whatever may be the promise of the future. Of those we speak in another place.

PUBLIC SCHOOLS OF CHATTANOOGA.

ORDINANCE PASSED BY COUNCIL OF CITY OF CHATTANOOGA, JULY, 1872.

Be it Ordained by the Board of Mayor and Aldermen of the City of Chattanooga :

1st. That there shall be a Board of Commissioners of Public Schools, to consist of two members from each Ward, who shall hold their office for two years and until their successors are duly elected and qualified.

2d. The election for the Commissioners of Public Schools shall be held at the first regular meeting of the Board of Mayor and Aldermen in December of each year, or as soon thereafter as the Board may decide, at which election one Commissioner shall be elected for each Ward, to hold his office for two years. *Provided*, that the first election for Commissioners of Public Schools shall be held at the second regular meeting after the passage of this Ordinance, or as soon thereafter as the Board may decide, at which time two Commissioners shall be elected from each Ward, one to serve until the first regular annual election for Commissioners succeeding thereto.

3d. It shall be the duty of the Commissioners of Public Schools to have

charge of all the school property of the city, to establish Public Schools, to regulate and provide for the same.

4th. It shall be the duty of the Commissioners of Public Schools, on or before the first of May in each year, to prepare and present to the Board of Mayor and Aldermen a full estimate of the appropriations that may be needed for the succeeding school year, stating in detail—first, the estimate for the purchase of grounds and for the building of school houses; second, the estimates for the maintainance and support of Public Schools. It shall also be their duty, at the close of each school year, to prepare and present to the Board of Mayor and Aldermen a full exhibit of the receipts and expenditures for the year, with a report of any other matter pertaining to the welfare of the schools as they may deem of public importance.

5th. No purchase of property for the use of the Public Schools, or sale of any property belonging to the schools shall be made, which in the aggregate shall exceed the sum of \$250, until a report of the same shall be made to the Board of Mayor and Aldermen, and ratified by them.

Under the foregoing Ordinance a Board of School Commissioners was chosen and the schools organized in January, 1873.

The first school year embraced five months only, the schools closing in June; but subsequently the school year was established to embrace ten months in the year. The first report for the year ending July, 1873, showed an enrollment of 1187, and the per cent, of attendance on average enrollment for all the schools was 82.82.

The school census of June, 1875, shows a school population of 2286. The report for the year ending July, 1875, shows an enrollment in Public Schools of 1674, and the percentage of attendance on average belonging 92.44.

The course of study in the Primary and Grammar Departments consists of eight grades systematically arranged including the ordinary branches of a practical business education, to which is added a High School department embracing in its course of study the higher English and ancient and modern language.

Thus the avenues are open to every child in the city to obtain a thorough business education and also to fit himself for successful study in higher institutions, when desirable.

There are eight school buildings in the city, of which three belong to the city, and the remainder are rented annually for school purposes.

So recent has been the organization of the schools and withal, so successful, that the finances have not kept pace with the demands, but, doubtless, funds will soon be forthcoming to build such houses as the present growing school system so much needs.

The School Commissioners are men of enlarged views and cul-

ture, and being men who have seen the practical benefits of free schools when brought to perfection, are laboring to make the Public Schools of Chattanooga all that is desirable. It is understood that an effort will be made next year to build some fine school houses, owing to the success of the schools in this city, and the almost universal desire of everybody to have them. Much credit is due the Commissioners for their untiring efforts, and unselfish aid.

The Superintendent, Professor H. C. WYATT has labored with the schools since their organization, and to his untiring efforts in this direction are we indebted for much of their success. It can be safely asserted that the public schools of Chattanooga are a credit to her. By common consent they are the pride and boast of our city.

An effort will be made next year to build at least one large school-house, for the accommodation of the more advanced scholars. This is much needed, and would add considerable to our free school system, besides being a great accommodation to their increasing necessities. There are several very fine sites around the city that could be had for this purpose, and there is no doubt the commissioners will make every effort to secure them. Let this good work go on, by all means. It is now in capable hands.

BEHM'S CHATTANOOGA COMMERCIAL COLLEGE.

This Institution has now been in operation for about six months, and altho' the growth has not been as rapid as could have been desired, still it is believed that when people become educated to their wants and needs in this respect, this College will grow to an importance in this city. Mr. Behm aims to establish a permanent College here, where all who wish can acquire a business education, including a thorough practical knowledge of the science of Double Entry Book keeping in all its various branches, equal to any similar school in the country. The plan of teaching embraces theory with practice. No text books are used: students are required to open and close books just as they would be required to do in the counting-house. No business man should be without a knowledge of this important branch of education. Indeed, farmers, mechanics, or professional men, all will be equally benefited. Mr. Behm's long experience and success in other places, warrants the belief that he will become successful here. The school should be sustained.

MISS SHEPHERD'S SCHOOL.

Miss Melissa Shepherd has succeeded Rev. H. H. Sneed in the female school, adjoining the Baptist Church property on Walnut street. At this institution is taught all the rudiments of an English education. Miss Shepherd was an assistant of Mr. Sneed, in which capacity she gave satisfaction. She is assisted by Miss Katie Stewart. Music is also taught in this school.

THE MECHANICAL INTEREST.

The mechanics of Chattanooga in nearly every instance are men of industrious, sober habits, and consequently thrifty. All over our fair city may be seen the cottage and elegant mansion, homes of these hard-muscled, industrious sons of toil. The machinist, the carpenter, painter, mason—all, of every branch of mechanism, are represented in the list of names that appear on the tax assessor's books. All honor to this class of God's noblemen!

WAGES OF WORKINGMEN.

Below may be found an approximate to the prices paid all classes of workmen in this city:

Operatives in Rolling Mills per day.....	\$ 1 50 to \$5 00
Founders and Machinists per day.....	1 50 to 3 25
Copper Smiths per day.....	2 00 to 2 75
Tin and Sheet-iron Workers per day.....	2 25 to 4 25
Blacksmiths, per day.....	1 50 to 3 00
Carpenters, per day.....	1 50 to 3 00
Cabinet Makers, per day	2 00 to 3 00
Painters, per day.....	2 00 to 3 00
Tailors, per day.....	2 00 to 4 00
Printers, per day.....	1 50 to 2 25
Stone Masons and Cutters, per day.....	2 00 to 3 00
Bricklayers, per day.....	3 00 to 4 00
Boot and Shoe Makers, per day.....	20 0 to 3 00
Carriage Makers, per day.....	2 00 to 3 50
Laborers, per day.....	1 00 to 2 00
Laborers in Blast Furnaces, per day.....	1 50 to 3 00
Clerks in Stores and Offices, per day.....	1 00 to 4 00
Distillers and Laborers in Distilleries.....	1 50 to 3 00

Of course this must be taken as an average—skilled labor generally being paid more than unskilled. To say that there is room for more workingmen in this city would probably not meet the views of some of our mechanics who frequently find it difficult to obtain work. This year all industries have suffered from the general depression of the country, and mechanics and laborers have, consequently, not fared so well in this city.

PUBLIC THOROUGHFARES.

While Chattanooga has never enjoyed (?) Nicholson pavements or cobble-stones, yet the Macadamized streets for all practical purposes have given satisfaction. The number of streets in the city is very large—Chattanooga is a city of magnificent distances. A great deal has been expended on these thoroughfares since the war, many of them having to be graded to suit the undulating nature of the location of the city. Of all our streets there are but a few in real good condition. Market street, the principal one of the city is in good condition, is 100 feet wide including 15 foot sidewalks, reaching from the Tennessee river on the north to Montgomery Avenue south, a distance of a little over a mile. From 10th street to the river, Market street presents a very fine appearance, with a gradual declination toward the river, thus causing a natural drainage. It is admitted by all that this street is capable of being made as fine as any thoroughfare of its size in the world. Chesnut and Pine streets, and Railroad Avenue, running parallel with Market, and to the river, are all important streets. Chestnut in all probability is destined to become the main thoroughfare for drawing produce from the river, should the Street Railway Company not monopolize the business. McCallie Avenue, running east and west of the city, at present the main thoroughfare to the Fair grounds, is capable of being made, and ought to be, a Boulevard. It is wide, has a very even surface, and has some of the finest residences in the city on it. The third street east of, and parallel with Market street, is Georgia Avenue, which has also some beautiful residences situated on it. In south Chattanooga, beginning at Montgomery Avenue, is Whiteside street, one of the smoothest and straightest thoroughfares in the city. It has been graded, graveled and cindered, and being the principal thoroughfare to the Mountain is considered the proper place of the city for a drive. James street, a continuation of 9th, running west, intersects with Terrace, on the east side of Cameron Hill, a good street, with a gradual ascent. Considerable work is yet to be done on our streets to make them what they ought to be, and this will be done as fast as circumstances will permit.

The sidewalk paving is done with stone quarried in and near the city, of a good hard quality, and durable, and with brick made here of good material. The clay hereabouts is well adapted to brick-making, and there are some buildings standing yet, which are in good condition built forty years ago. The stone, however, is the prevailing material for paving, and some of it is 12 to 18 inches thick—such pavements will last many years.

HOTELS OF THE CITY.

Chattanooga is quite well supplied with hotels and boarding houses. She can boast of one of the finest in the South for size—the Stanton House. The Read House is the next largest, a description of which is given in another place. The first we notice, as being the largest and finest, is

THE STANTON HOUSE.

This hotel is centrally located, two squares from the post-office and one block from the Alabama & Chattanooga Railroad depot, and in two blocks of the proposed Cincinnati Southern Railway depots. It was erected in 1870, by Col. J. C. Stanton, of Boston, at a cost of \$200,000. It is situated on an eminence, commanding a fine view of the surrounding country. The main building has a frontage on Market street of 125 feet by 40 feet wide, with an ell 100x40 feet; it is five stories high, and contains 100 rooms, including offices, parlors etc. The basement floor contains billiard rooms, saloons, wash-rooms, etc. On the first floor are the ladies' and gentlemens' parlors, sitting and reception rooms, the office and dining rooms. Ascending to the second floor by two pair of wide steps, on either side of the office, we find the bed chambers, double and single, for families or otherwise as may be desired. On the third and fourth floors are the remainder of the rooms. Every room is light and cheery, well ventilated, and furnished with all conveniences. Gas, water, bath-rooms, closets, etc., on every floor. The rooms are all finished in the very best of style. Verandas environ the house on three sides, on first, second and third floors, from which one may obtain a fine view of the surrounding country. The Tennessee River, Lookout Mountain, Mission and Walden's Ridge, the Blue Ridges, Cumberland Mountain, are all in full view.

This hotel is furnished from top to bottom with elegant furniture; the parlors are models of beautiful elegance, and everything wears an air of easy comfort.

The grounds of 3 acres are laid off into parterres, with wide graveled walks shade trees, shrubbery and grassy plats on every hand, thus adding much to the delights of this hotel.

No better spot could have been selected for a hotel. No healthier place could have been found in the city. The air is pure and invigorating, and at all times a pleasant breeze may be felt at this delightful house.

The next hotel we speak of is

THE READ HOUSE,

built in 1870 by some capitalists of this city and Mr. I. Tower, of Boston,

This hotel stands pretty much in the same spot as did the old "Crutchfield House." It is a substantial 3-storied brick, 150 feet front, by 100 deep, containing some fifty rooms, including offices, reading rooms, ladies' and gents' parlors, etc. Underneath the hotel proper are handsome storehouses, the hotel offices, reading-rooms etc. The dining-rooms are on the second floor, as

are also the ladies parlors and ladies chambers. The third floor contains the remainder of the chambers.

This property has ever been valuable, owing to the fact that it is in a stone's throw of, and right opposite the old Union Passenger Depot. It has been run as a hotel by Dr. J. T. Read, since its erection five years ago, and has gained a fine reputation. It changes hands the 1st January, 1877, at which time it is to be taken by Maj. M. D. VAN HORN,

OF THE VAN HORN HOUSE.

This elegant little hotel is situated just opposite the Read House, east, and presents a very handsome appearance. It is a three story brick, 60 feet front, 100 feet in depth, and is as snug and comfortable a hotel as can be found anywhere. The rooms are limited, but the *table d'hôte* is not. The proprietor is noted for his generous display of edibles, and his knowledge of catering to the inner man is not to be surpassed.

When he gets the Read House, the two will run together, in such a way as to combine elegant ease and quiet comfort, with meals and lodging separate or not, as it is desired.

THE COMMERCIAL

is the old building used since the war as a hotel, just at the U. P. Depot. It was the first one erected since the war, and has passed through many scenes of prosperity and misfortune. It is now in the hands of Mr. J. W. F. BRYSON, an old hotel man, and late of the Battle House, Nashville. It has quite a run of custom, having retained part of its old business.

THE BUFORD HOUSE

is a three story brick, 60 by 100 feet, on Market and 5th streets. It is used mostly as a boarding house at present. Among the other boarding houses, is the Morgan House, Market and 6th streets. Both of these are good places to put up at. The Planters' House is also open as a boarding house.

STREET RAILWAY.

The Chattanooga Street Railway Company was organized and commenced building their lines in the spring of 1875, under the old charter granted to the Lookout R. R. Co., some few years ago, and which was never assumed. The officers are, A. L. HARRIS, President, and V. A. GASKILL, Sec'y. The capital stock is \$25,000, with privilege of increasing it to \$500,000.

In September of 1875 the cars were put on, and to-day there is one and a half miles completed, extending the whole length of Market street from the river to Montgomery avenue, running almost due north and south. They have four passenger cars running, and propose increasing with the demands of business.

The charter also includes freight privileges. The company have had four cars built by the Wason Car Co., for this purpose, and will put them on in due time for the river trade of the coming season. They have extended their track to the water's

edge, at the river, and are putting it in a good condition for receiving the grain as it is discharged from the steamers and flats.

The enterprize shown by this company, despite the croakers, has resulted in a convenience to our growing city which has come none too soon, and which is liberally patronized. Of course the company have not extended their lines in every direction, as some contend they should, simply because it would not pay at present. The road will be built out to the iron bridge, however, with a fair prospect of being extended to Lookout Mountain. This would result in an appreciation of property in that direction, a larger number of visitors to Lookout, and investments and building beyond the most sanguine expectations of any one. But the extension to the iron bridge across the Chattanooga creek, will, in itself, be of incalculable benefit to parties living in that direction, as well as inure benefits to the city.

THE SUPPLY OF WATER.

THE LOOKOUT WATER COMPANY

Became the purchasers, in 1869, of the fragments of water works erected during the war by the Federal army, and were chartered the same year. They received about three miles of pipe and some half dozen plugs, and found much of this piping had been laid across private property which had to be taken up and re-laid at heavy cost. The officers of this Company are: A. M. JOHNSON, President, JOHN W. JAMES, Secretary. The principal stockholders are non-residents. The capital stock at this time is \$50,000, and the bonded debt \$65,000. The pipe system embraces about twelve miles, with fire-plugs generally distributed over the city, though not as extensive as is actually necessary for the protection of property. The reservoir is situated on the extreme point of the lower spur of Cameron Hill, 175 feet above low water, 130 feet above Market street, and overlooking the city and the Tennessee River. The capacity of this reservoir is 2,000,000 gallons. The grounds of the Company embrace ten acres around the reservoir, which have been greatly improved with walks and carriage ways, terraces, shade trees, etc. The grounds look like a vast carpet of green, over which parties may be seen strolling daily.

PUMPING CAPACITY, &c.

The pumps have a capacity of about 1,000,000 gallons in 24

hours. The engine rooms are situated on the top of the bank of the Tennessee River, cor. Pine and Water streets, within a few hundred yards of the reservoir. The offices of the company are situated on Market and 10th streets, and were built in 1874.

WHAT SHOULD BE DONE WITH THE PROPERTY.

The city should become the owners of the Water Works. This has been the decided opinion of many of our most far-seeing citizens. Now is the time for the city to make some arrangement for possessing a property which is increasing in value, and which is of so much importance in every respect. The management, increase of piping, control of fire plugs, and supply, should belong to the city. A few public fountains on one of the principal thoroughfares would be a great blessing, and did the city own the Water Works, she could in time afford this comfort to the people who, themselves, would be getting value received for their expenditure.

THE WHARF AND IMPROVEMENTS.

The wharf frontage on the Tennessee River is 1000 feet. This was formerly the property of V. K. Stevenson and others, and is now owned by Capt. A. L. Harris and G. L. Cook. Within the last few years it has been rather poorly kept up, and this has consequently militated against the river trade at this point. Now, however, it is proposed to change these things. The owners are making some improvements which can only be appreciated as the advantages become more apparent. The uneven, rugged nature of the present wharf, save the improvements now going on, is almost a bar to the successful drawing of grain.

The depth of the wharf from top of bank to the water's edge, at low water mark is some 400 feet. The wagon roads circumventing the hill have been so steep at places as to cause the teamsters to have to urge by every means his already overstrained team to reach the summit. In bad, rainy weather, it is almost impossible to get up the banks.

The present owners are bringing up these declivities, leveling the undue rises, making a gradual, gentle slope. The Street Railway Company has a track extending in a diagonal direction down the wharf, and then back on the water's edge. On the upper side of this tracking, good Macadamized wagon roads, with several crossings, are made, making an improvement, as regards the drawing of grain with teams, more than a hundred per cent.

A wharf-boat with capacity for 3000 bushels corn is to be

built, with all conveniences for shippers and buyers. Here the consignor may have his grain stored, until ready to be drawn to the depot for shipment. While on the banks, tarpaulins will be provided for covering grain in wet weather.

The improvements have long been needed, and will be appreciated, both for the actual conveniences and the decidedly better appearance of the wharf. The Street Railway Company will have about 3000 feet track, built of 30 lb. "T" iron fish-bar, imbedded in rock, extending down the wharf and to the ware-houses on the river.

We understand that in addition to those already built, Mr. V. K. Stevenson, and others, will probably build a fine row of ware-houses on the wharf, large, well-constructed and convenient. These improvements will tend to revive the river trade, and make this a most important branch of our business. The government improvements on the river will stimulate the river trade, and tend to encourage farmers to increased productions. Speed the day of increased business in this direction.

THE CHARACTER AND SUPPLY OF TIMBER.

On either side of the Tennessee river, on the bottom lands and along the numerous creeks and streams, the timber is very plentiful, and grows to a large size. The ash, mulberry, poplar, pine gum, cottonwood and sycamore flourish. On the hills and ridges can be found the white and red oak, chesnut, black jack, and hickory, which are the prevailing woods. The number of saw logs rafted down the Tennessee river yearly is estimated at ten thousand. The prevailing timber for purposes of sawing is poplar and pine. For purposes of wagon building and buggies, agriculture implements, &c., the hickory, oak and ash are unsurpassed. When the hickory is well seasoned it becomes susceptible of very high finish, and is as durable as it is possible to find anywhere. The walnut supply is not as good as it might be; still it is fair. There are some larger maples in the county but not to that extent desirable. A hub, spoke and handle factory on a large scale would pay handsomely here. Certainly there would be no doubt of a good supply of timber. The test of these woods is being made every day in our midst. Carriages, wagons etc., are being manufactured out of them, which are giving entire satisfaction. Chestnut abounds in such quantities on Walden's Ridge that thousands of shingles are annually made and brought to this market. Ash abounds in all the valleys, and is easily worked and finishes well. Long-leaf pine is found at the foot of Raccoon Mountain, in Lookout Valley.

COAL SUPPLY AROUND CHATTANOOGA.

There is an inexhaustible supply of coal in this vicinity, of different qualities, and comparatively cheap. The limited capital employed in mining this valuable mineral, and the want of cheaper transportation facilities, has made it more costly than it should be. But the interest manifested, nay, the imperative necessity in the development of the coal in this section, has stimulated the lagging capital, and with the completion of the Cincinnati Southern Railway, there will be an immense rush to the coal fields. We copy in this connection a few extracts from Killebrew's Resources of Tennessee :

Coal is found in the greatest abundance in Walden's Ridge and Raccoon Mountain, of excellent quality for heating, manufacturing and smelting purposes. There are several strata varying in thickness, those now worked averaging about four feet. "Pockets" and "folds" are frequently presented, swelling out from eight to fifteen feet in thickness. Mines have been opened near the base of the mountain range, also about 300 feet from the base, and on the top. These coal strata do not present a uniform composition. Analysis of the coal at different points in Hamilton and adjoining counties presents different results. These results may be stated as follows :

Fixed Carbon.....	64 to 76
Volatile matter.....	27 to 18
Ashes.....	9 to 6

Sometimes sulphur is present in the proportion of .25 to .35, then again it is not found at all.

The veins of coal are generally in a horizontal position, with a slight dip to the north-west. The elevation of the beds above the valley makes the drainage of the mines very easy.

The coal banks are two and a half to four miles from the Tennessee River. The Cincinnati Sonthern Railway will run between them and the river. Coal has been mined in different places in the county. During the year 1873 about 240,000 bushels were taken out, seventy men being employed in and about the business. This coal yields good illuminating gas, but not so largely as some other coals. It cokes very well. The analysis of the coke from the coal of Dade county, Georgia, adjoining this county, shows—

Carbon.....	82.800
Ash or Clinker.....	16.200
Sulphur.....	0.98
Undetermined.....	.092

Iron ore extends through the county. It is known as fossiliferous red hematite or dyestone ore. It is found in the "dyestone" ridges running parallel with Walden's ridge, and between the coal veins and the Tennessee river. Two of the well known strata of this ore which extend from Virginia into Alabama, run through this county, one of them crossing the river at Chattanooga. These veins lie in different positions, and their thickness varies from two and

one-half feet to five feet. The following is an analysis of this ore :

Silica.....	5.36
Peroxide of iron.....	93.21
Lime.....	61
Alumina.....	.27
Phosphorus.....	.21
Moisture.....	.17
Loss.....	.17
	—
	100
Per cent. of metallic iron.....	.65.28.

The Coal Mines contiguous to Chattanooga are : The *A*Etna Mines, 13 miles from the city, on the N. C. & St. Louis R. R.; the Vulcan Mines, 16 miles, on same Road.; the Shoal Mines, 6 miles northeast of Chattanooga; Soddy Creek Mines, 20 miles above; Sale Creek Mines, 30 miles above; and various other Mines of a limited capacity, all contributing more or less. All of these coals have special qualities recommending them—some for welding purposes, others for coking, heating, &c.

COSMOPOLITAN CHARACTER OF CHATTANOOGA.

It has become a well attested fact that Chattanooga gives a welcome to every law-abiding man, of any nationality, creed, or political belief, whatsoever. So true is it that we are a people of enlarged views that we can point to our churches, societies, public offices, and businesses represented by Northern and Southern, Democrat and Republican, Jew and Gentile. The Common Council is a striking test of this fact: there has not been a single Board since the war in which some of these faiths were not represented. In matters of distribution of local offices, the lines are never closely drawn politically. Very frequently one of antipodal political faith may be seen voting with his opponent, for the purpose of securing better men, and vice versa. In business, the question of birth, whether north or south of Mason and Dixon's line, does not enter into consideration, unless, indeed it be with a view of uniting the extremes for the purpose of advancing their common interests. In social matters, there are but few on either side of the house who do not recognize the fact that, no matter where born, superiority attaches to not one above the other on account of the line. But on the principal that our interests are common, we join together to advance those interests, whether of a social or pecuniary nature. As an instance of the desire to bury the animosities of the past, we mention the fact that, in all celebrations Northern and Southern may be found side by side vieing each with the other in doing honor to our Government. True, there are exceptional cases, as in everything in life—but in this place, they are few and far between.

MANUFACTURING INTERESTS.

CHATTANOOGA IRON COMPANY.

The increasing demand for pig iron, of the superior quality made from the ores in this section, and the proximity of the materials together with the transportation advantages, made it imperatively necessary for the establishment of these works. In 1874, the stockholders commenced, and completed in September of that year, the Chattanooga Iron Works, investing about \$125,000. The capital stock of the company is \$250,000. Their works are located on the south bank of the Tennessee River, west of the city and in close proximity to the Roane Iron Mills. The capacity is 25 tons pig per day of 24 hours. The furnace is never suffered to get cold; consequently the smoke from their towering stacks and chimneys is constantly seen rising to mingle with that of many other manufactorys in this city.

The buildings are complete and substantial, and well constructed. Everything works systematically and like a clock—the employees being good workers, and well and regularly paid their wages. The officers are men of integrity, business capacity, and practical. They are as follows: J. N. McLANE, President; J. E. BLAKE, General Manager; J. A. AUSTIN, Sec'y and Treasurer; EDWARD DOUD, Superintendent. This is one of the industries of which we may boast.

CHATTANOOGA GAS LIGHT COMPANY.

This corporation was organized in 1870, with an authorized capital of \$200,000, of which amount \$107,000 is paid in. The company has six miles piping, two substantial brick buildings, with a manufacturing capacity of 50,000 feet per diem. The gas is made from Coal Creek and E'na coals, and is a very brilliant, pure light. The coal used makes about four cubic feet of gas to the pound. The price of the gas when first introduced, was \$5 per M feet; it is now furnished at \$3 net cash. The officers are: James A. Caldwell, Pres't.; Chas. E. James, Sec'y., Treas., and Sup't. Directors: J. A. Caldwell, W. P. Rathburn, S. A. Key, T. G. Montague, E. F. Sevier, E. A. James, H. C. Evans. The principal stock is owned in this city.

THE MUTUAL GAS LIGHT COMPANY.

In 1875, this corporation erected in this city Gas Works after the Needles patent. At that time, enthusiastic admirers of the cheap and easy plan of making this gas, put time and capital into the works, which seemed about to become a success. In a short while, after having laid pipes and made connections in many of our business houses, some misfortune caused a temporary suspension, which finally resulted in an abandonment of the works.

Roane Iron Company.

The Roane Iron Company was incorporated in the year 1867, with a capital of \$1,000,000. The officers are as follows: W. P. RATHBURN, President; H. S. CHAMBERLAIN, Vice-President and Manager; H. CLAY EVANS, Secretary; S. B. STRANG, Assistant Manager.

DIRECTORS.—W. P. Rathburn, H. S. Chamberlain, Xen. Wheeler, D. M. Key, S. M. Winchester, Chattanooga; Dudley Baldwin, M. C. Younglove, Cleveland, Ohio; W. O. Rockwood, Indianapolis, Indiana; A. R. Forsyth, Greensburgh, Indiana; Abram S. Hewitt, New York.

General offices at Chattanooga, Tennessee.

The Roane Iron Company are manufacturers of pig iron, muck bars, railroad iron. They have two blast furnaces for the manufacture of bituminous iron, located at Rockwood, Roane county, Tennessee, 100 miles above Chattanooga. Stack No. 1 was erected in 1867, and is 56 feet high, with 14 feet bosh, closed top. Stack No. 2 was erected in 1867, and is 65 feet high, with 16 feet bosh, closed top.

The total annual capacity is 20,000 tons.

The Company owns in Roane and adjoining counties about 20,000 acres of coal and iron lands.

ROANE IRON WORKS AT CHATTANOOGA.

The rail mill was built in 1865 by the Government, for the purpose of re-rolling; has under the present Company (which have operated it since 1870,) been enlarged and increased in capacity; it has 10 heating furnaces. The annual product is 30,000 net tons rails. The puddle mill was built in 1870—has 10 double puddling furnaces, with an annual capacity of 10,000 tons. The main mill building is 650 feet long, by 60 feet in width. Construction and repair shops are carried on by the Company, consisting of carpenter shops, blacksmith shop, boiler shop, pattern shop, foundry and machine shops. All the buildings are covered with slate or iron, as a protection against fire.

The Company also own a large number of dwelling houses, which are used by the employes (700 in number,) 500 of whom are in the Chattanooga mill.

The Company have also a reservoir, 200 feet above the river, for supplying the mill and premises.

Chattanooga Fire-Brick Works.

This establishment was started up in 1871 by a party of capitalists, who found that this point was the best under all circumstances, that could be found for this business. The material is mostly obtained from this vicinity, and the remainder at a short distance. The capacity of the works now is 6000 brick in 12 hours. Their brick have stood the test of furnace heat, and have been pronounced as good as can be made. They have 10 kilns, and 2 drying floors, 600 feet long, and all the necessary machinery for making bricks, drain pipes, etc. Their shipments extend to Atlanta, North Alabama, Knoxville, Nashville, etc., etc. Situated on the river they have the advantages of water, and when the Tennessee River improvements are completed, cheap transportation. The present proprietors, Messrs. Montague & Co., will push the business to a complete fruition.

Etna Foundry and Machine Works.

This enterprise was established two years ago in this city, by G. W. Wheeland, a practical man, who was attracted to this place because of the many advantages it possessed for works of this character. The Foundry and Machine Shops are large, spacious buildings, well adapted to the business, situated on the line of the Nashville, Chattanooga and St. Louis Railway, with a side track convenient for loading and unloading cars. The making and repairing of circular saw and grist mill machinery, furnace castings, etc., is made a specialty. One of the principal features of these works, also, is the manufacture of

THE NEW IMPROVED TURBINE WHEEL,

for the Southern States. The proprietor has furnished quite a number in this section and to the surrounding country, and certificates may be had of high recommendation. If our farmers and mill-wrights would put their heads together, and their capital, they could improve the milling business very much, especially in the pecuniary line.

Enterprise Machine Works.

The young men composing this firm are from Pittsburg, and located in the city some five years ago. From a very small beginning by Mr. Truxall, in 1870, their business has increased to a very substantial one. Their shops are located on R. R. Avenue, near corner of 7th, and here may be seen a large amount of tools, lathes, &c., with which they turn out their work. Their specialties are Small Tools, Pumps, Lathes and small Engines. A 4-horse engine built by themselves runs their machinery. They have also a number of lathes and tools, which they made, thus constantly adding to their facilities for work. They have now one of the completest shops in the city, and are kept quite busy on repairs of iron and brass, besides constantly receiving orders for new jobs. These are the kind of men to encourage. They earn their bread in the sweat of their face.

Furniture Factory.

There is but one establishment in the city manufacturing Furniture by steam: that of Mr. Chas. Sundquist, who located here in 1865, on a limited scale, and has built up his business by degrees, until it now amounts to quite an item in our manufacturing interests. Mr. S. occupies the old ante-bellum factory, cor. 6th and Cherry sts. All kinds of Furniture can be made here, and some very fine specimens of counters and other fancy work have been turned out from this establishment. There are about ten hands employed, and these are kept quite busy.

There are several other parties making furniture in the city—among them, Messrs. Waltersdorff & Co., who are doing a very fair business. Being good workmen, they make a fair article of work. There is no reason why Furniture should not be made here on an extensive scale: all the woods are in the vicinity that are necessary. Cheap fuel and water power in abundance are other recommendations in favor of its manufacture at this point.

Bakeries

There are several bakeries in the city, all having a reputation for good bread; indeed with our facilities here there is no excuse for not having the best of bread. Among them we notice the City Bakery, corner Cherry and 7th streets; the Star Bakery, Market between 5th and 6th streets; Irons', at the Rolling Mill, and the

CHATTANOOGA STEAM BAKERY.

This institution was established in the city in 1871. The Bakery has a capacity for 20 bbls. in 24 hours. Mr. A. A. Aull, the proprietor, is patentee of a Rotary Oven, which does a large amount of work, and that to perfection. He has also cracker machinery, and every appointment for a first-class bakery. His trade extends to towns contiguous to this city, and is increasing gradually.

Great Southern Candy Manufactory.

About twenty months ago, Mr. Herman Stern came to this city and established a Candy Manufactory with a limited capital—the object being to build up the trade by making pure candies at low prices. The candy heretofore sold in this town was nearly all of it bought abroad, a small proportion of it only being made here. The firm have added a fine lot of machinery since first establishing here, and their facilities for manufacturing this article are as good in a limited way as those of any place. Their trade extends into northern Alabama, Georgia and East Tennessee. They have some very valuable new patents on candy heaters by steam.

Broom Factory.

Among the many industries we have to record, none is more to be encouraged and fostered, to a certain extent, than the Broom Factory. Here is an article which is indispensable to every household, and one too which is quite a tax upon the people. Heretofore thousands of dollars a year have gone north for this single little article. We are glad to learn that this is about to be changed. The Chattanooga Broom Factory is a fixture, and although in its swaddling clothes, as it were, will in time grow to respectable size, if fostered by our merchants. Mr. J. T. Wooten came here in the fall of 1874 and began the making of brooms on a small scale, but owing to the scarcity of material suspended in spring of 1875. Pretty soon, however, the works started up again under the firm name of Wooten & Smith, only to have another setback in January of this year, when they were burned out, not having a dollar of insurance. Baffled but not despairing of final success they went at it again a few months ago, and they are constantly increasing their facilities for enlarging. They ship most of their goods south, besides furnishing merchants here with a great deal of their stock. Their corn is raised abroad, but this enterprise will be the means of encouraging the raising of it here, in the future.

Tin Ware, Cornice and Sheet Iron.

The Cornice and Sheet iron business is represented in this city by two, and the Tinware by four houses. Messrs. Ashley & Snow began business in this

city in 1873, and since that time have done considerable work in their line. Being practical workmen, they know their business well, and give satisfaction. The Heavy Sheet Iron and Copper work is one of their specialties—including smoke stacks, distillery work, etc. They have done considerable work in these lines, and we believe are prepared to duplicate any house north or west, freight and other expenses considered. Their tin and cornice and sheet iron work speaks for itself, as it were, and we take occasion to mention these things because it must be distinctly understood that Chattanooga can furnish anything in this line needed, and no one but will concede that it is best and safest to patronize home institutions and manufactoryes, than to send abroad, thus encouraging and stimulating home enterprises, increasing population and valuations, and lessening the burdens of taxation.

Organ Building.

There has been but one pipe organ built in this city, as yet, but the following description of this one will give some idea of our facilities for this branch of industry. From the Daily Times:

"The instrument is a medium sized Church Pipe Organ, the dimensions being eleven feet in height, eight and a half feet in width, and five feet in depth. The case is of black walnut (from this vicinity) and the appearance is neat and chaste, without attempt at elaborate ornamentation. It consists of one manual, of fifty-six notes; and one pedal, of twenty two notes. There are twelve stops—three full stops, six half stops, and three mechanical stops. The half-stops are so put for the sake of convenience, and to facilitate the manipulation of the instrument. These stops are, together, equivalent to six full stops, commanding three hundred and thirty-six speaking pipes. The principal, the gamba, and the flute or metallic (except the twelve lower notes of the flute). The open diapason consists of forty-four metallic, and twelve wooden pipes. The stop diapason consists of thirty-two metallic and twenty-four wooden pipes. The range of the tones varies from a sixteen foot bourdon to a four foot principal, giving in the aggregate a highly creditable volume. The variety and style of playing afforded by the combination of stops is unusually great. Solo passages may be rendered with great ease and beauty. The touch is very good for a new organ; and the swell works very finely. The transition through all the shades of decrease and increase (the minuendo and crescendo) is easily and rapidly obtained. Its power is above the average of organs of this size. It fills the large building in which it stands, blending strength with sweetness in an unusual degree.

It was constructed by Messrs. John Fernquist, A. Alson, and G. Manson. These gentlemen are Swedes who have resided here for some years. Mr. Fernquist learned the art of organ making in Stockholm. He lived three years in New York, and put up an organ in one of the principal churches in Brooklyn.

These gentlemen are prepared here at home to manufacture, from home materials, instruments that are unquestionably as good and as cheap, and in all respects as desirable, as any to be found in the New York and Northern

markets. We sincerely trust they may be patronized. This is not a paid advertisement. It is a voluntary, cheerful tribute to an instance of domestic skill and enterprise which deserves the highest commendation.

Wason Car Works.

These works were erected in 1873. The Company have eight commodious brick buildings, well arranged for their several purposes. Framing shop, two stories, 58 by 122 feet; pattern shop, two stories, 52 by 122 feet; pattern shop, two stories, 52 by 55 feet; erecting shop, one story, 42 by 265 feet; blacksmith shop, one story, 47 by 133 feet; machine shop, one story, 47 by 61 feet; boiler room, one story, 21 by 47 feet; foundry, one story, 60 by 133 feet; annealing room, one story, 52 by 53 feet.

The Wason Car Company are manufacturers of boxes, baggage and flat-cars, and make a specialty of car wheels; they also do a general machine business. Their facilities are first-class. The capacity of the works is large: their full force being two hundred and fifty men, when running to the full capacity. The officers are, Chas Wason, President; W. H. Parker, V. Pres't., and Sup't.; F. F. Morrill, Secretary and Treasurer.

Chattanooga Marble Works.

In 1874, Mr. P. C. DAILY, a gentleman of large experience in this line located in this city, beginning on a limited scale the business of marble. Although the demand has not been very heavy, and notwithstanding the financial embarrassments of this section, Mr. Daily has been able to make a hold on the place. His work is of the best characters, and is to be seen in our city cemetery at various places in this city of the dead. One remarkable piece of work is a monument made for Mr. Joseph Ruohs, of Italian marble. In fact Mr. Daily uses this marble almost entirely, together with Vermont. He has the facilities for all work in his line, and his prices are remarkable considerate. He is to be engaged on a beautiful Shaft for the Confederate Memorial Association, of Chattanooga, the model of which has met with very general approbation.

Mr. Daily has been shipping to points around the city, and were it not for the scarcity of money, would be overwhelmed with work.

Slate Roofing.

This branch of industry is in its infancy in this city. Mr. D. D. JONES, a Welsh gentleman, who learned his trade in England, is representing the business singly and alone in this city. He came to Chattanooga in 1873, and has done some considerable work,

among which is the following: The Wason Car Works, Roane Iron Works, Chattanooga Cotton and Woolen Factory, and many nice dwellings and other buildings in the city. Mr. Jones is an energetic close worker, keeps a stock on hand of slates, from his quarry in Georgia, and is prepared to do any style or quantity of work in his line. It is to be hoped this enterprise will be fostered, on account of the economy in having such roofs put on our houses, the protection from fire and the good appearance of slate roofs.

The Southern Pump and Pipe Factory.

The business was established in January, 1874, with a capital of twenty-five thousand dollars. It is a branch of the extensive factory of J. F. Temple & Sons, of Chicago. The establishment of these works in Chattanooga has proven a success. They ship to points all over the South, and into Missouri, Illinois, Indiana and Ohio. Also, East as far as Virginia. They make about 5,000 pumps per annum, and use some 500,000 feet of lumber, which they procure from the upper Tennessee river. They also manufacture large quantities of pipe for water and gas mains, and for leading water from springs. The pipe is made to sustain an equal pressure with iron pipes made for the same purpose, and is decidedly cheaper.

The Novelty Machine Works.

These works were established in 1870, by Messrs. R. Fell and Harry Wilcox, who had been engaged in the Vulcan Works, in this city. Their business was started on a very limited scale, and subsequently Mr. Fell retired, leaving Harry Wilcox sole proprietor. Since this time Mr. Wilcox has added considerably to his business. He has been compelled to occupy two large rooms, which were lately constructed for his store-room and shops. Here in these shops may be found machinery for gas, steam and water-pipe fitting, the repair and manufacturing of small tools, pumps, lathes, and, indeed, all kinds of machine work. Mr. Wilcox has had considerable experience in his line, and has worked in the press manufacturing rooms of R. Hoe & Co., New York city. His success in building up works of this character from such small beginnings, is an evidence of the importance of them, and indeed the necessity. Mr. Wilcox is agent for quite a number of manufacturers of pumps, engines, &c. He has made most of his machinery, including an engine of 10 horse power.

The Milling Business.

The location of Chattanooga on the Tennessee River, down whose bosom is floated annually thousands of logs from upper East Tennessee, gives to this point a splendid advantage for the saw-mill business. There was at one time five or six saw-mills in operation, but owing to unforeseen circumstances, several of them were closed out. But the two remaining are doing a fine business, the first of which we notice is that of LOOMIS, HART

these articles which are used every day to such an extent, are all complete. Water, coal, timber &c., in abundance, on all lines of railroads and on the river.

& STEWART, successors to LOOMIS & BENNETT, who began the business in a small way in 1865. Having suffered considerably by two freshets of the Tennessee, the latter firm determined in 1875 to build high and substantial enough to resist all encroachments of the mad torrents, and the consequence is a very large and well built mill. The new coalition was formed this year (1876), and they have capital and energy enough to make it a success in every way. The capacity of the mill is 20,000 feet per day. They employ twenty-five hands.

Manufactories not Mentioned Elsewhere.

STEAM, WAGON, AND IMPLEMENT WORKS.

An establishment with limited capital, making heavy wagons, spokes, handles and hubs, entirely of Tennessee timber, of a superior quality.

CARRIAGE AND WAGON SPOKES.

Make all kinds of carriages, buggies, phaetons, wagons, &c. Messrs. Fechner & Bro. have turned out some elegant work, and have taken premiums on various occasions.

THE LOOKOUT MACHINE SHOPS.

These works are located in the western part of the city, near the Rolling mill and Blast Furnace. Messrs. Leard & Wright, the proprietors, do all kinds of machine work. They have erected several portable engines in this city, and other work which is highly spoken of. The proprietors are both practical men.

WAGON AND CARRIAGE WORKS.

Messrs. Fassnaht & Co. have an establishment of this character, where some first-class work has been put up—among it some fine coaches and closed carriages for this city. These gentlemen are all hard workers, and are building gradually a handsome trade.

MESSRS. MURPHY & HULSE

Have also works of a similar kind. They are both well known to this community, and have done some as creditable work for livery stables in this city as can be found anywhere. They use home timbers altogether.

A FEW MANUFACTORIES THAT WOULD PAY.

With every facility for manufacturing in the vicinity, it certainly will be of interest to those who do not know, to give the subject a careful persual. There are many of the smaller industries which are needed here and would pay handsomely. The following may be mentioned as some of them: Vinegar Factory; a general woodware factory, including buckets, tubs, churns &c.; agricultural implement works; last and peg factories; shoe manufacture; watch factory; paper mills; bag factory; box factory; glass factory, edge tools, &c., &c., The facilities for producing

THE MERCANTILE INTEREST.

While Chattanooga makes no pretensions toward a wholesale center, yet she may be proud of her merchants who, embarrassed by freight discriminations, and the usual drawbacks to a new and growing town, have braved the perils of competition with those of our older sister cities on every hand.

The completion of the many works in the city on hand and in contemplation, together with the tide of immigration all around us, will increase Chattanooga's facilities for this branch of commerce.

In Dry Goods, Messrs. W. Crutchfield & Co. are the pioneers. They were established in 1868, and amid all the discouragements of the last few years have held their own. They do a safe business in a limited way, not caring to build up an extensive credit trade. Their business has footed up as high as \$160,000 a year, and is in a fair way to increase substantially with the growth of the city.

In Hardware, Builders' Material, &c., Messrs. VANCE & KIRBY and J. H. WARNER & Co., are doing a very handsome business. The improvements on the Tennessee River, the Cincinnati Southern R. R., and the improvements in the city have stimulated this business to a great extent. Messrs. V. & K. are from Ohio, and have been located in this city in business for five years; and in this time, under the personal supervision of Mr. J. C VANCE have improved the hardware business in this city very much. They have erected on Market street a magnificent 3-story brick, an illustration of which is found in their advertisement in this book. The first floor is devoted to Shelf Hardware, Samples, &c.; the second floor contains packages of Shelf Hardware, a large stock of Carriage and Wagon Work, hand Machinery for home work, &c.; the third floor is full of Builders' Material, such as Doors, Sash, Blinds, &c. They make a specialty of Rubber and Gum Belting, Standard Scales and Powders. Chattanooga has cause to congratulate herself that these gentleman are upholding this branch of business in so creditable a manner.

Messrs. J. H. WARNER & Co. are the pioneers in the Hardware business in this city—especially as to Mr. W., who has been connected with the business in various ways some fifteen years in this city. His knowledge of this business is certainly extensive; while the management under his superintendence has greatly added to the character of this line of trade in Chattanooga. Mr. H. K. CARTER, the other member of the firm, is resident in New York City, which enables the firm to keep posted in all matters pertaining to their business, and to keep up their stock to a good

advantage. Everything in the line of Builders' and Shelf Hardware, Leather and Gum Belting, Powder, Shot, Fishing Tackle, Doors, Sash and Blinds, Scales, &c., &c., may be found on the different floors of this establishment.

Messrs. Martin & Bros. are wholesale dealers in groceries, and grain merchants. This firm have built up in the last few years a magnificent trade, extending for many miles around Chattanooga, and in the grain trade to all points South which draw their supplies from this place. This firm are erecting a large brick building on the corner of Ninth and Market streets, which will be capacious enough for their constantly growing trade. They are live, energetic, clever gentlemen, and are worthy of the success they have met with in this city.

Messrs. C. P. Roberson & Co. are also wholesale grocery merchants. This firm began business in this city some two years since, and are constantly growing into favor. They furnish a large section of this country, supply some of the public works going on around the city, &c. They are reliable men, and are doing a good business.

Business Men.

In speaking of the standing of our merchants and business men personally, we use only the facts. The business men of Chattanooga, taken as a whole, enjoy first-class reputation abroad. Although there have been failures in this place, within the last few years; it may be truthfully said they were partly owing to outside influences, the tightness of the times, and unforeseen disasters. Notwithstanding the flood, and fires, and financial embarrassments in the past decade, our business men having generally withstood it all, and to-day are doing as well as could be expected. Many have erected substantial business houses, while others have invested in real estate, manufactories etc. They are enterprising merchants, advertise, help the churches, benevolent institutions, and patronize home industries.

Banking Institutions.

The accommodations for money in this city are confined at present to two banks, the First National and the Chattanooga Discount and Deposit. The City National Bank was in existence a short while, but decided last year to withdraw from business in this city.

THE FIRST NATIONAL BANK

was organized in December, 1865, with a capital of \$200,000, and an authorized capital of \$500,000. The present capital and surplus is \$395,000. The officers are: W. P. Rathburn, President,

T. G. Montague, Cashier. Directors, Chas. J. Martin, Tom H. Payne, C. W. Vinson, W. P. Rathbun, S. B. Strang, H. G. Daniel, T. G. Montague. This bank was erected in 1869, cor. Market and Sixth sts., a substantial 3-story brick, stone front, with basement. The first floor is handsomely and conveniently fitted up and used for the business of the bank, with a fire proof vault; the second floor is divided off into offices; while the third floor is used as a Masonic Hall.

CHATTANOOGA DISCOUNT AND DEPOSIT BANK.

This institution was organized September 1st, 1867, with a capital of \$24,000, authorized capital \$500,000. The officers are—John King, President; Thomas Crutchfield, Vice-President; A. C. Burns, Cashier. They do a grand banking business.

Both of these banks withstood the shock of 1873, notwithstanding the immense pressure upon them and the whole country. They are sound institutions, in the hands of honest, capable men.

Population and Valuations---Increase within the Past Decade.

The increase in population within the past decade has been fully 125 per cent: the highest estimated number of actual residents at the beginning of the year 1866 was 5000 inhabitants; of these many were regarded as temporarily here prospecting for a place to settle. At this period civil authority had just succeeded to that of martial law and the prospect and future of Chattanooga was beginning to attract the earnest attention of not only its actual residents, but many of those whom the incidents of the past few years had made partially acquainted with its many advantages. There were but few stores or business houses and a scarcity of dwelling houses existed. Much of the business was done in the Government warehouses built for the accommodation of army business and left vacant by the removal of the troops; and, in some instances, tents were still in use. Now the population is assumed to be between 11,000 and 12,000. The census of the place has not been taken since 1870, but from other statistics it is safe to estimate the population at near the latter number.

VALUATIONS.

These, as shown by the tax assessors rolls, are given below. If not always made with the best of judgment, they are nearly always made under the same general circumstances, and should be proportionally correct; the action of a single Board of Mayor and Aldermen, the term being but one year, seldom has but little

effect upon actual values; it must be a long-continued model or maladministration of affairs that shows itself in the values attached to private property. It will be seen that our highest valuation was for the year 1873. Without explanation, the natural conclusion would be that the reverses in the general prosperity of business of that year was unusually severe here. Such was not the case. At some previous date the Board of Mayor and Aldermen had assumed to exempt from taxation a large amount of property not made exempt by legislative action; the assessor for that year, guided, no doubt, by what he conceived to be his duty under the law, assessed such exempted property to the value of hundreds of thousands of dollars, and it appears in the total value for that year. The legal right, or the wisdom, if the right existed, of the Board of Mayor and Aldermen to exempt a class of property from taxation not made exempt by State legislation, is not a question for discussion in a work of this kind.

ASSESSED VALUATIONS.

Assessed Valuation in.....	1866	\$ 919,000 00
" "	1867	950,000 00
" "	1868	968,168 00
" "	1869	1,689,296 00
" "	1870	1,195,616 00
" "	1871	2,289,375 00
" "	1872	3,065,631 00
" "	1873	5,044,013 05
" "	1874	4,442,645 25
" "	1875	4,214,432 16

THE MINERAL REGION CONTIGUOUS TO CHATTANOOGA.

CHATTANOOGA AND THE CENTENNIAL MAP.

The growing interest manifested in the mineral wealth of this vicinity has resulted in the consummation of an enterprise which demands a concise but explicit showing in these pages. We speak of the Centennial Map, which had its origin in this city in October, 1875, where our citizens were called together for the purpose of taking the matter into consideration. At that meeting the greatest enthusiasm prevailed, and the following Commissioners appointed, with W. A. HOSKINS, President, S. B. LOWE, Secretary, W. D. VAN DYKE, Treasurer: Thos. Crutchfield, A. C. S. Igou, S. B. Lowe, Wm. Clift, J. W. James, H. S. Chamberlain, Thos. Webster, A. G. W. Puckett, Richard Henderson, S. A. Key, W. L. Eakin, A. M. Johnson, John L. Divine, H. N. Snyder, W. C. Payne.

It was resolved to have prepared a map, showing the mineral

district in and around Chattanooga, lithographed, colored, and finally put up at the Centennial, together with samples of the ores, marble, copper, zinc, coal, etc., represented on it.

The committee in this city went immediately to work, issuing circulars appealing to those interested in the matter to contribute funds for this laudable undertaking. The main work and expense, it was evident, would fall on Chattanooga, and with a unanimity characteristic of the people, they responded from time to time with their means for the prosecution of the work. In this connection we copy from the Nashville (Tenn.) American the following justly deserved mention of

CHATTANOOGA'S ENTERPRISE.

"We cannot too highly commend to the imitation of other counties and communities and cities in the State the enterprise of Chattanooga. They are preparing to have a topographical, geological and agricultural map of a section of country, 200 miles by 160 miles in extent, with Chattanooga as near as possible, in the center, comprising the Chattanooga mineral district. It will contain the location of agricultural lands, the situation of all mining lands and mineral deposits, with the character and quantity of the minerals specifically designated. The map will be made accurate, and lithographed copies will be distributed in this country and Europe, as well as placed on exhibition at the Centennial, accompanied by specimens of the minerals. The commission is working indefatigably, gathering up information concerning every deposit and specimens of each, so that all shall be reliable, accurate information. Circulars have been sent to individuals, and now the commission very properly ask of the county courts lying within the Chattanooga mineral district such an appropriation as will make it beyond all chance a perfect success and accurate beyond possibility of error. The Chattanooga mineral region comprises a large portion of the great dye-stone or hematite belt, and is one of the most important in the State, rich in iron and coal and various other minerals, with the finest water power for manufacturing, excellent timber, and with Chattanooga as its natural center, railroad transportation to all points of the compass, and also river transportation by the Tennessee.

This map will also represent the vast mountains of limonite iron ore in the Unaka range and in the northern parts of Georgia and Alabama, as well as the red fossil ores of the latter State, all contiguous to and properly belonging to the Chattanooga iron district. Such a map will show at a glance how surely Chattanooga is destined to become the great iron center of the Mississippi Valley, and will aid immensely in attracting labor and capital to a field fraught with immense possibilities in the future.

These commissioners, aided and stimulated by a live people, have gone to work, unmindful of hard times, to take the surest method of getting rid of those hard times, by making their capabilities and possibilities known to the world in no slipshod, half-considered, ill-executed sort of way, but by the application of brains, energy and live spirit to do all that can be done. They

propose to place one hundred tons of their three varieties of iron ore, of coal, coke, copper, zinc, mica, marble, lead, manganese, slate, talc, baryta, silica, etc., on exhibition to illustrate their resources.

In addition they will exhibit specimens of timber, fruits, grain, and other agricultural products, with the localities of their production, and the situation of fertile lands, and all other lands noted on the map, and the localities where settlers may obtain lands, to show how well adapted this locality is to sustain a mining and manufacturing population.

Such efforts cannot fail to benefit Chattanooga and her surrounding counties and also the State. They are the efforts of a live, progressive population, who appreciate the situation and go to work like men to compel success by their own efforts. Why cannot their example be emulated by other counties, equally as favorably situated. Knoxville can with equal expectation of profit in the same way present upper East Tennessee, Clarksville in the north and Columbia in the south, might be the centers for a movement to illustrate and present the great Middle Tennessee iron belt, and Memphis and Jackson are able to present West Tennessee and its peculiar resources. We commend to the rest of the State the example of Chattanooga, with the sincere hope that it will be emulated, if necessary, by every county.

The map is 17 feet long by 13 feet and 8 inches wide, and cost about \$1,500. It embraces a territory in extent 100 miles each way, East and West, and 75 miles North and South from Chattanooga. The city council of Chattanooga subscribed in addition to the private subscriptions liberally, as did also Hamilton and other counties. But the care of assuming the expenses and bringing to a successful issue this undertaking, rested with the citizens of this community, and right nobly have they met it.

The following from the *Times* of this city is very interesting as showing the difficulty in arranging a correct map, and we produce it in full:

OUR CENTENNIAL MAP AND WHAT IS BEING DONE WITH IT.

We yesterday had the pleasure of visiting the large room in Kunz's building, in which the map of our great mineral district is being made, and through the politeness of Mr. Kelly, who is superintending the "building" of it, obtained a full insight into its manner of construction. The maps that are mostly being used to transfer from are maps furnished by the United States War Department for the occasion, and which are also laid off in corresponding squares representing two miles—thus the draftsman can the more readily follow each stream or subject of his labor without any difficulty. The committee on the map have adopted a very happy plan, we think, to get the most correct boundaries, locations of streams, minerals, &c., by having a great many tracings made of all the different localities, and sending those tracings to individuals in all the different localities who are familiar with the topography of the country, streams, minerals and locations of ores, &c., and who will make all the necessary corrections on the same, if any should be needed, and

returning them here for transfer to the large map. In this way the committee get the benefit of the combined knowledge of the people of the surrounding country. But it is in the county lines that the greatest difficulty is experienced. By a critical examination of all the acts of the different legislatures, from the commencement up to the present time, it is ascertained that over two hundred different lines have to be corrected that are embraced in the section that will be covered by the map, while two new counties have to be laid down that have never yet appeared on any map at all, and those are London and James. In one county—Knox—a section of territory about one mile by ten, has been embraced within her boundary in all the maps extant, which never did belong to it, and so we could refer to an endless number of errors which have been perpetuated from one publisher to another through all time, but which will now be corrected and placed upon record as they actually are.

To say that we will be more than amply repaid for our expense and trouble will be to put it very mildly. The wonderful resources of this mineral belt have to be studied and examined to be half appreciated. And when only half is known, the gathering of capital and labor to this, the great central entrepot of lower East Tennessee, Northern Georgia, Northern Alabama and Southern Kentucky and Ohio will be immense.

The following Industries are represented on the map, giving location and capacity:

GEORGIA.

FURNACES—(Charcoal).

Cherokee Iron Works, Cedartown, Polk county; annual capacity, 8,000 net tons.

Diamond Furnace, Cartersville, Cass county.

Ætna Furnace, Polk county. Daily capacity 10 to 12 tons, net.

Pool Furnace, Bartow county.

Ridge Valley Iron Company, (furnace) Rome, Floyd county.

Rogers Furnace, Bartow county; annual capacity 2,500 net tons.

COKE.

Bartow Furnaces, (Bartow Iron Company, Bartow Iron Works,) Bartow county; annual capacity, No. 1, 2,500 net tons; No. 2, 6,000 net tons.

Rising Fawn Iron Company, Rising Fawn, Dade county.

ROLLING MILLS.

Rome Iron Works, Rome, Floyd county, Ga. Annual capacity, nails 2,000 net tons; spikes 1,000; bar iron 3,500 tons.

ALABAMA.

FURNACES—(Charcoal.)

Cornwall Iron Works, Cedar Bluff, Cherokee county.

Rock Run Furnace, Pleasant Gap, Cherokee county; annual capacity, 4,000 net tons.

Round Mountain Furnace, Round Mountain, Cherokee county; annual capacity, 4,000 net tons.

Stonewall Iron Works, Stonewall, Cherokee county: annual capacity, 6,000 net tons.

Tecumseh Furnace, Tecumseh, Cherokee county; annual capacity, 10,000 net tons.

TENNESSEE.

DYESTONE REGION—BITUMINOUS COAL AND COKE.

Chattanooga Iron Company, Chattanooga, Hamilton county. One stack, 61x12 $\frac{2}{3}$; completed in 1874; blown in September, 1874: closed top; annual capacity, 6,800 net tons.

Oakdale Furnace, Kingston, Roane county; works at Oakdale; two stacks 65x16 $\frac{1}{2}$.

Rockwood Furnace, Roane county. Annual capacity 24,000 net tons.

ROLLING MILLS.

Roane Iron Works, Chattanooga; annual capacity 30,000 tons.

Vulcan Works, Chattanooga. Not running.

COUNTIES:—TENNESSEE.

Wilson, Putnam, DeKalb, White, Cannon, Rutherford, Coffee, Bedford, Warren, Van Buren, Morgan, Cumberland, Bledsoe, Sequatchie, Marion, Grundy, Franklin, Lincoln, Moore, Hamilton, James, Rhea, Meigs, McMinn, Bradley, Polk, Roane, Knox, Blount, Monroe, Anderson, Loudon.

GEORGIA.

Catoosa, Dade, Walker, Murray, Whitfield, Chattooga, Gordon, Cherokee, Bartow, Floyd, Gilmer, Pickens, Milton, Cobb, Paulding, Fannin, Union, Habersham.

ALABAMA.

Limestone, Madison, Jackson, Morgan, Marshall, DeKalb, Blount, Winston, Etowah, Cherokee.

NORTH CAROLINA.

Clay, Cherokee.

MINERALS.

Coal; Brown Hematite Iron Ore; Red Fossil Iron Ore; Gray Specular Ore; M'gn't Black Oxide Iron Ore; Copper; Zinc; Baryta; Lead; Marble; Maganeze, Gold; Roofing Slate; Hydraulic Cement; Talcose Slate and Mica.

PUBLIC BUILDINGS, DEPOTS AND HALLS.

Chattanooga is not as well supplied with public buildings as might be. No doubt this will be remedied in a short time, especially as the place is growing, and the financial condition improving. Hamilton County has a large three story building used for a court-house, which is neither ornamental nor convenient as to office or places for holding court. This is to be remedied, however, soon, as the County is making arrangements for erecting a handsome court-house on an eminence in this city, which will add greatly to the wants of the city and county in this respect.

The Post Office.

This building was erected in 1871. It is a two story brick, the front being of yellow sand stone from off the line of the Alabama & Chattanooga Railroad, in Alabama. It is centrally located as to the geographical position of it, on the east side of Market street, near the contemplated depots of the Cincinnati Railroad. It fronts 42 feet on Market street by 87 feet in depth. The first floor ceiling is 18 feet high, second story 15 feet. The building was fitted up after plans furnished by the Department at Washington. The second floor is fitted up in large and spacious offices. The whole presents a very neat and imposing appearance.

The Passenger Depot.

This is a large wood truss building, erected in 1871, 400 x 121 feet, situated on Market street, within two blocks of the proposed site of the Cincinnati Southern Railway buildings. It has conveniences for a comfortable first-class depot. Baggage, Lunch, Sitting Rooms, Parlor, Dining Rooms, and all convenient rooms for transacting the business incidental to Mail, Baggage and Express business.

The structure stands northeast and southwest, a most happy position for the reception, without much trouble of all railroad passenger cars, for the accommodation of which there are six tracks. Railroad offices are placed in proximity to the various rooms, on the east side of the depot. The plan upon which this depot was built will insure ample facilities for the transaction of all business incidental, and ample room for everything necessary.

The Freight Depot of the Alabama & Chattanooga Railroad.

This is located on the west side of Market street, corner of Union, and fronts on Market 55 feet. It is a two-story brick for 40 feet back, containing the general offices of the Company. It stands one story high, same width, 200 feet back, along the line of Union street, this part being used for local freight. In close proximity to this structure is a brick storeroom for general supplies. These offices are fitted up well, and all conveniences for the transaction of business may be here found. The building is as good as any, and better than the average in this city. Platforms extend around three sides of it, and the tracks extend along the eastern side for transhipping freight.

The Alabama & Chattanooga R. R. Round-House.

This is a brick structure, designed to accommodate twenty five engines, having eleven stalls completed. It is situated on the south side of Hooke, and west of Divine streets. It is a well built house, and reflects no little credit on the company, as do all their improvements.

The Alabama & Chattanooga Railroad Shops,

are wooden structures, consisting of machine shop, wood machine shop, wood repairing shop, blacksmith shop, coppersmith shop, pattern-maker shop, paint shop, upholsterer shop, and two store rooms for general supplies. Both machine shops are well supplied with machinery. In these shops may be found

every facility for building and repairing motive power and rolling stock of the road. Some very fine and creditable work has been turned out of these shops.

Western and Atlantic Railroad Depot.

This depot is situated on Market and Ninth streets. It is a two-story structure, fronting on Ninth 60 feet, and running back 30 feet on Market street. It then becomes a one-story, and extends back 150 feet. The front part of the building is used for offices. It is a very substantial structure, and large enough for all practicable purposes. A good platform for pedestrians is built along the east side of the depot.

The Nashville, Chattanooga and St. Louis Railway Depot.

This is a one-story brick structure, about 200 yards south of the old Union Passenger Depot. It contains offices, freight room, &c. It is convenient for the business of this road, but is neither large or handsome enough for this corporation. This Company could well afford a large, convenient structure at this point. We have no doubt they will erect one, as contemplated, ere long.

The Memphis and Charleston,

And the East Tenn., Virginia and Georgia Railroads have combined depots in east Chattanooga, near the contemplated Cincinnati Southern Railroad depots, and within a few paces of the new passenger depot, post-office, and Alabama and Chattanooga Railroad depots.

Halls.

JAMES' HALL.

This is the largest Hall in the city—being 60 feet wide by 146 feet long, and has a large Stage with Curtain Scenery, and all necessary appointments for theatrical entertainments, concerts &c. The proprietors purpose making this one of the finest theatres in this section at no very distant day. There are two entrances to this Hall—the front and main on Market street, the rear on Sixth street.

CLIPPINGER'S HALL.

This is a very handsome Hall on Market, near Ninth street, used at present by the congregation of the Second Presbyterian church. It is capable of being made a very pleasant little Concert Hall.

CONCORDIA HALL.

Our Jewish fellow-citizens have fitted up a Hall where the Concordia Club give entertainments of a musical and dramatic nature. It is a very pleasant little Hall, quite large enough for the present purposes, with stage, scenery, &c. This is not a public Hall, being used only by the club above spoken of.

OTHER HALLS.

The City Hall is used for purposes of City government only. Poss' Hall, situated on Market street, near Ninth, has not been fitted up for any purpose—is used occasionally for balls, parties, and entertainments of like character. There are some Halls in the city used by the Masons, Odd Fellows, Temperance and other Societies.

SOCIETIES AND RELIGIOUS ORDERS.

There are quite a number of orders in the city, religious and otherwise. The

SISTERS OF THE ORDER OF ST. DOMINIC,

established in this city, in January of this year, an institution of instruction for young ladies, to the end that they might obtain a first-class education. Accordingly, the school began the first session as indicated above, under the title of

Academy of Notre Dame de Lourdes.

Here are taught the languages, music, &c. The Academy is the building formerly used as a priestage, adjoining the church of Saints Peter and Paul, on Gilmer street. The next academical year begins in September, the Sisters having been engaged, during the vacation, in making arrangements for a larger and more extensive school.

Attached to the church, under the conduct of the Sisters, also is a Parochial School, but distinct from the Academy. This school is taught in the church of Saints Peter and Paul.

Houses of Worship

Cumberland Presbyterian, northwest corner Eighth and Chestnut.

Methodist Church, South, corner Eighth and Market.

Methodist E. Church, corner Sixth and Pine.

Presbyterian (1st) Church, corner Seventh and Market

Presbyterian (2d) Church, Clippinger's Hall, Market street.

Sts. Peter and Paul (Roman Catholic), Gilmer street.

St. Peter (Protestant Episcopal), southwest corner Chestnut and Eighth streets.

Baptist (1st) Church, corner Walnut and Sixth streets.

Baptist (2d) Church, Whiteside street, south Chattanooga.

Union Church, south Chattanooga, Whiteside street.

Chattanooga Spiritualist Union—Meet in Concordia Hall.

Hebrew Synagogue, Hooke's Building, Market street, between Ninth and Eighth.

(COLORED.)

M. E. Church, corner Lookout and Fifth streets.

A. M. E. Church, Long street.

Shiloh Baptist Church, Tenth street.

Zion Baptist Church, Montgomery avenue.

Lutheran Church—Services in First Presbyterian Church.

Masonic.

Chattanooga Lodge No. 199, meet first and third Monday in each month; H. H. Knox, W. M., E. F. Sevier, Secretary.

Temple Lodge No. 430, meet second and fourth Mondays; R. M. Tankeley, W. M., L. Sheldon, Secretary.

Hamilton Chapter No. 49, R. A. M., meet second and fourth Tuesdays; A. J. Pierce, H. P., J. B. Nicklin, Secretary.

Mount Moriah Council No. 50, meet first Thursday, quarterly; J. H. Vandeman, T. L., J. B. Nicklin, Recorder.

Lookout Commandery No. 14, K. T., meets first Thursday in each month; John B. Nicklin, Jr., E. C., J. A. Hood, Recorder.

Odd Fellows.

Knights of Honor, Schiller Lodge No. 158, meets every Thursday night; A. W. Lawter, Dictator, Fred. Mayer, Reporter.

Wilsey Lodge No. —, meets every Wednesday night; H. B. Case, N. G., George M. Peckinpaugh, Secretary.

Gutteburg Lodge No. 178, meet every Monday night; P. Lazard, N. G., A. E. Mayer, Secretary.

Phillips Lodge No. 112, meet every Tuesday night; W. R. Carlile, N. G., Perry Ransom, Secretary.

Dramatic.

Concordia Club, meet every Sunday at their hall in Kunz' Building; P. R. Albert, President, S. Geismar, Secretary.

Benevolent, Etc.

Young Men's Christian Association; Wm. Morris, President, L. P. Thatcher, Secretary. Meet second Monday in each month, at the various churches.

Chattanooga Turn Verein, corner Ninth and Market streets, meet every Sunday night; H. Schneider, President, F. Stoermer, Secretary.

Confederate Memorial Association—Mrs. Anna F. Hight, President; Tomlinson Fort, Treasurer and Secretary. Meet first Thursday in each month.

I. O. B'Nai B'Rith, meet second and fourth Wednesdays; F. Decker, President; L. Loewenthal, Secretary.

Tennessee Lodge No. 21, Knights of Jericho; G. A. Gowin, S. K. C., Sam'l Cate, Secretary; meet every Tuesday evening.

Hebrew Benevolent Association; A. Tschopik, President, David Friedman Secretary. Meet every Sabbath.

Knights of Pythias, Damon Lodge No. 2; J. H. Van Deman, C. C., J. H. Warner, V. C. Meet every Friday night in Odd Fellows' Hall.

Workingmen's Union—R. V. Brennan, President; Pat. Garvin, Secretary. Meets monthly, in Fireman's Hall.

Machinist's and Blacksmith's Union No. 5, Tennessee—John Calder, President; Geo. Manuel, Secretary. Meets weekly.

Colored Societies.

Benevolent Society No. 4, meet the first and third Tuesday, at Hall, corner Tenth and King streets; A. Nickerson, President, D. E. Edenburg, Secretary.

Phoenix Lodge No. 7—F. A. Y. M., meet the first Monday night in each month at 241 Market street; C. P. Letcher, W. M., Eldridge Lewis, Secretary.

C. O. S. of Relief No. 17, meet each Friday night at their Hall on Railroad avenue, between Eighth and Ninth streets; H. N. Hutchenson, President; R. C. Hawkins, Secretary.

Y. M. C. A., meets first and third Tuesday night in each month, corner 5th street and Georgia avenue; A. P. Melton, President, D. N. Crutchfield, Secretary.

Character of the Watering Places Contiguous to Chattanooga.

There are a number of springs and places of resort around Chattanooga, which are well patronized, and offer superior inducements to those seeking rest, health and pleasure. Within a radius of fifty to sixty miles may be found springs of splendid virtues for many of the diseases that flesh is heir to.

CATOOSA SPRINGS, GEORGIA.

These wonderful Springs contain a rich and versatile wealth of mineral water. Located in Catoosa county, twenty-five miles southeast of Chattanooga, Tennessee, and 113 miles north of Atlanta, Ga., and within two miles of the Western & Atlantic Railroad, among the picturesque and salubrious hills of North Georgia, they include the enormous number of Fifty-two Springs! Containing all of the distinct and powerful mineral properties to be found in the famous mountains of Virginia—white, red and black sulphur, Alleghany, the all-healing and chalybeate, magnesia, soda, alum and iodine; also, the waters characterizing the Montvale of Tennessee, and the Indian Springs of lower Georgia, all of which are to be found here in abundance, within the compass of this "Magic Vale," said to afford a certain cure for dyspepsia, rheumatism, gout, liver complaints, scrofula, and all kinds of cutaneous affections.

Only a portion of these springs are in good order, but these are the principal ones, and indeed all that are necessary. But the wonders of nature are displayed in the disposition of this great boon to man—good, pure water.

The country in which these springs are located is of a rolling, undulating nature. The water flows off freely, thus affording no breeding places for those troublesome pests, gnats, mosquitos, &c. On every hand are hills and knolls, suggestive of romance. The country around is composed of some of the best farmers, who make good crops, live well, and supply the Springs with all the products of the land at very reasonable rates.

THE PLANS ADOPTED

For accommodating guests at this pleasant spot among the hills and vales of North Georgia, are admirable, and withal economical and attractive. No one need say that a pleasant place like this is good enough without some of those incidentals, such as music and flowers, and parties, &c. These are all provided as a sort of relief from the monotony that would otherwise be the consequence. Rest, both for mind and body, is essential to a great extent, for all diseases. And while it is not expected, nor

is it necessary for those who visit these Springs, to participate in all the frivolities of the place; still, those who are disposed may find enough light entertainment to satisfy the most eager. We speak of these things because many families wish to spend a few weeks in summer at places where it is not necessary to dress with the precision and exactness of most of the fashionable watering places. It is a sociable, refined, quiet country place, where one may live pretty much as he chooses with his family, either in cottage or at the hotel, boarding, or keeping house, and yet enjoy all the privileges of grounds, music, water, baths, in fact, all the adjuncts to this healthful resort, and we are proud to speak of these Springs, as they are so close to Chattanooga as to give it a right to include them within its boundary of pleasant, healthful country contiguous. The hotel at present is in capable hands, as will be testified to by many of our citizens, and every thing necessary for comfort and pleasure will be procured for guests.

Sulphur Springs.

These springs are situated near Smith's Station, on the Alabama and Chattanooga Railroad, 25 miles from this city. The country surrounding is wild and picturesque, and the climate very mild and pleasant. The waters are very fine and pure, and possess medicinal properties of a high order. This is a quiet retreat, within easy reach of the city, and is a decidedly cheap place to rendesvouz for a short time in summer. Many of our citizens have patronized these springs, and have found them very pleasant.

Rhea Springs.

commonly called Sulphur Springs, are located in Rhea county, Tenn., on the Tennessee River, 75 miles from Chattanooga. These springs are celebrated for their curative powers in diseases of the bowels. Many remarkable cures have been effected here. Especially have Chattanoogans reason to be proud of these springs, as several have had considerable benefits from them. The situation of the springs is very pleasant. Mountains and hills on every side—a stream of pure water from the mountain, three miles distant, courses through the village of Sulphur Springs. The surroundings are very pleasant. The Cincinnati Southern Railway passes within one and a half miles of the place, thus bringing it within 55 miles of Chattanooga when that road is finished.

Other Places of Resort.

Within five to ten miles of Chattanooga are several places frequented by those wishing to escape the heat and dust of the city

for a few days. Walden's Ridge, five miles distant, affords some few accommodations; while for several miles up the Tennessee valley, at the base of the ridge, accommodations may be had with the farmers. Of Lookout Mountain, a favorite resort of Chattanoogans, we speak in another place.

There is no lack of pleasant places all around us, and they are economical, pleasant and inviting.

Worship of God in the Early Days of Chattanooga.

The number of churches in our midst is a gratifying source of reflection. Although we may not be designated as a city of churches, still it may not be amiss to say that, in the matter of places of worship, both for white and colored, our city is not to be exceeded by any other of equal population and advantages.

The first place of worship in Ross' Landing, was in a little log cabin which stood on the lot where the Methodists subsequently erected their Church, on Fifth, between High and Lookout Streets. This house is still standing, and is the property of the A. M. E. Church. The log cabin has been razed to the ground long ago, but its reminiscences linger with us still in the minds of those who remember the events of 1837-8, ere yet the town was laid off into lots. Among the preachers were, Rev. T. C. Atkins, late Presiding Elder of the Methodist Church, South, in this city, and Rev. — Hicks.

THE FIRST ORGANIZATION OF A CHURCH

in the town, was June 21, 1840, when a small band of Christians met and laid the foundation of the First Presbyterian Church. The original members are all dead, save the following, so far as can be ascertained: W. W. Anderson, Robert M. Hooke, Henry and Elizabeth Jones, Lucy A. McFarland, Caroline L. Smith, Mary L. Hooke. The first minister was Rev. W. H. Cunningham, and the next, Rev. A. Blackburn. The building was erected on S. W. corner Third and Walnut Streets—was used for a while as church and school house, and subsequently sold to some parties who removed it to a point between Seventh and Eighth Streets, on Georgia Avenue, and there used for manufacturing sash, doors, blinds, &c. It was subsequently sold to the Commissioners of Public Schools. The lot on which stood this first church was exchanged for the present location of the Church on Market Street.

The contrast between the worship of God in early days, and the present, is striking. Then, a small room with puncheon floor, and clap-board roof—now, large brick edifices, handsomely finished and a host of members. Then, the old style of congre-

gational singing was in vogue—now, in many places, the choirs do all the singing for the congregation. From this brief sketch it will be seen that the pioneers of Chattanooga were scarce installed in their log cabins when they commenced the organization of churches. This early religious work gave a moral and Christian tone to society in the then village, which has “grown with its growth and strengthened with its strength.” Now Chattanooga can boast about twenty churches, and in the superior cultivation and moral and religious character of her society is not surpassed by any city of America. These considerations are of importance to all who may desire to locate in a growing city, where church privileges and educational advantages, as well as business facilities, are offered them.

Character of the Country Tributary to Chattanooga.

For a distance of from 50 to 100 miles around Chattanooga, on every side, there are hills and mountains, (relieved by rich valleys watered by bold streams,) whose pure air, luxuriant growth of flowers, and adaptability to grazing stock, make them vastly beneficial to this place. The river bottoms (first-class) and second bottoms produce corn and some of the grass to perfection—the former sometimes reaching 100 bushels per acre. They are not so well adapted to cotton, but that staple can be grown upon them. The first, or river bottoms, are constantly washed by the Tennessee river, which leaves deposits of rich alluvium, thus feeding the growing crops so plentifully as to render them practically fresh. The hills and mountains are adapted to fruits, grazing, and potatoes, besides furnishing vast trees for saw logs and other purposes. Rivers and railroads permeate these sections in every direction, thus bringing their products right to our doors.

Inducements to Immigrants.

The inducements Hamilton county offers to immigrants are many. Besides good and cheap lands, water power, &c., the county has many advantages in other ways. The soil is of such a varied character as to furnish employment and profit for those wishing to engage in any branch of agricultural pursuits. There are some good roads, and others are being built, leading to different portions of the surrounding country. Numerous streams water the county, and fine springs and wells are in abundance. The dairy business is one that would prosper and pay well here. Stock has only to be fed a small portion of the year. Chattanooga consumes a great deal of milk, and no doubt a cheese factory would pay if there were enough dairies. The variety of soil is such that market gardeners would find a handsome remuneration for their efforts in this direction. Every kind of vegetable can be grown early, and markets north of us supplied with vegetables at very good rates.

Buildings Erected in the Past Decade.

Chattanooga was almost literally without houses at the termination of the war. There were but a few either of residences or business houses left. Towards the river there were a few old bricks left on Market street, and several government buildings. To-day may be seen a number of large substantial brick buildings—few wooden buildings having been allowed since a destructive fire in 1870. The buildings on business streets are mostly 3 stories in height, some two stories—all are built of good brick and stone.

There were erected about one hundred brick business houses, and some thirty-five wooden—not including the smaller buildings, and of dwellings it is estimated over five hundred have been erected during this decade past. In point of architectural beauty and design many of these dwelling-houses cannot be excelled. Terrace street contains quite a number of large, fine residences. The fire limits extend over a large portion of Market street, between Tenth and Fourth streets, and consequently no wooden buildings are erected in these limits.

To Capitalists and those Seeking a New Location in the South.

In the foregoing pages we have briefly referred to the attractions and advantages the city of Chattanooga and the country immediately surrounding it offers those seeking investments or homes in the South. These may be summed up as follows: Great beauty of location; extraordinary healthfulness, all the comforts and conveniences of a progressive, enterprising city; superior educational, moral, and religious advantages in free schools, academies, and colleges, churches of all denominations, and benevolent and other societies of every order; navigable rivers, and railroads leading to every section of the Union; immense manufactories, in large number, already in operation and doing a most remunerative business; mercantile and mechanical and art establishments flourishing; natural advantages for an indefinite expansion of all her material interests; nearness to the inexhaustible coal fields of Tennessee, Georgia and Alabama, insuring a fuel supply at prices lower than at Pittsburg; nearness to the iron supply; a market right at the doors of all the manufactories. These are a few of the points discussed. They have been presented fairly and without exaggeration, and are to be relied upon. They are submitted with confidence, because an examination by a personal visit to the city will assure their credibility. There can not be found in all the South a more beautiful or desirable place of residence, or investment in any of the branches of manufacturing, mechanical industry, or commercial enterprise, than Chattanooga. Its citizens will extend a cordial and hospitable welcome to all who come among them to seek the pleasant homes that are to be had here at low prices. Those who may come will not regret that they did so.

OUR RAILROAD SYSTEM.

The iron arms of motive power on wheels, stretch out in every direction over the State—most of them are good paying roads, well built and equipped. Their necessity and great help to the country is questioned by no one of intelligence. It is not the intention of this book to go into details of the inception and progress of railroads in the State, but a brief sketch of those in which Chattanooga is more directly interested will be given here.

Nashville, Chattanooga and St. Louis Railroad.

Is a line between Chattanooga, Tennessee, and Hickman, Ky.,—the main line being 321 miles in length with a branch from Bridgeport to Jasper 12 miles; and from Wartrace to Shelbyville, 8 miles, making in all, 341 miles.

ITS CONNECTIONS

are at Chattanooga, with East Tennessee, Virginia & Georgia, Western & Atlantic, and Alabama & Chattanooga Railroads; at Stevenson, with Memphis & Charleston Railroad; at Cowan with Tennessee Coal Railroad Co.; at Decherd with Winchester & Alabama Railroad; at Tullahoma, with McMinnville & Manchester Railroad; at Nashville, with Louisville & Nashville, Nashville & Decatur, St. Louis & South Eastern, and Tennessee & Pacific Railroads; at McKenzie, with Memphis & Louisville Railroad; at Frost's, with New Orleans, St. Louis & Chicago Railroad; at Paducah Junction, with Paducah & Memphis Railroad; at Union City, with Mobile & Ohio Railroad, and St. Louis, Iron Mountain & Southern Railroad, thus making it the shortest and most direct line between the Northwest and Southeast.

The condition of the road at present is first-class. Gangs of men are kept constantly at work between Nashville and Chattanooga, and on the lines toward Hickman, repairing, relaying track, in many instances replacing iron with steel rails. The officers of this road have been often complimented on their efficiency and general deportment. The line between Nashville and Chattanooga has had much to contend with in passing through an area of rough, but picturesque country, which requires a large outlay to keep in repairs. Again, the road was extensively used during the war by the government, and as a consequence, much was to be done to recuperate the rolling stock, roadway, etc., since the termination of the war.

Principal Towns on the Road.

There are several thriving towns on this line. West of Cumberland mountain the country is very fine, approaching Nashville.

Among the smaller towns we notice the following:

DECHERD,

junction of the Winchester & Alabama Railroad; Tullahoma, a very pleasant place, junction of the McMinnville & Winchester Railroad; Wartrace, where the branch to Shelbyville makes its detour.

SHELBYVILLE

is a town of some five thousand inhabitants, situated in a very pleasant country, which is highly productive, people intelligent, thrifty and sociable.

WINCHESTER

is an old town on the Winchester & Alabama Road, two miles from the main line. This is the town of schools—has some fine educational institutions, principal of which is the "Mary Sharpe," a female high school. Good country, fine water, noble streams flowing through the county (Franklin).

MURFREESBORO,

thirty miles from Nashville, South, in the centre of a large farming section, an old town, once the capital of the State. The people are thrifty, refined and hospitable.

TULLAHOMA

is a very healthfully situated town, being the highest point between Nashville and Chattanooga, 69 miles from the former place. Churches and schools, and other attractions.

FINANCIAL CONDITION OF THE ROAD.

Capital stock	\$6,595,295.63
BONDED DEBT.	
Company's six per cent. bonds, indorsed by the State of Tennessee.....	1,100,000.00
Company's four per cent. bonds held by United States Government	1,000,000.00
Company's forty year seven per cent. bonds.....	4,700,000.00—\$6,800,000.00
Gross receipts for fiscal year ending July 1, 1876:	1,753,037.68
Total expenses.....	1,020,673.27
Net receipts.....	\$732,364.41
Taxes paid.....	26,295.55
Interest on bonded debt paid.....	435,000.00
Two semi-annual dividends to stockholders.	196,000.00— 657,295.55
Leaving a surplus of.....	\$75,068.86

OFFICES, OFFICERS, &c.

The principal offices are at Nashville, Tenn. E. W. Cole, President; R. C. Morris, Resident Engineer; J. W. Thomas, General Superintendent; C. W. Anderson, General Freight Agent; R. C. Bransford, Secretary and Treasurer; W. L. Danley, Gen. Pass'gr and Ticket Agent; T. D. Flippen, General Book-Keeper.

The East Tennessee, Virginia and Georgia Railroad.

The East Tennessee and Georgia Railroad was chartered as the Hiwassee Road in 1836, and completed in 1856. It has three termini: Bristol, Chattanooga and Dalton, and it is a continuation of the two lines from that point to Dalton, with a branch from Cleveland to Chattanooga—in all, 270 miles. The officers are:

R. T. Wilson, President; Joseph Jaques, Vice-President and Superintendent; Charles M. McGhee, Vice-President; James G. Mitchell Secretary and Treasurer; O. H. P. Rogan, Auditor; James R. Ogden, General Freight and Ticket Agent; James B. Hoxsie, Master Transportation.

The financial exhibit of this road, made at its last Convention in 1875, is very flattering. The gross earnings were \$1,059,985 65: expenses of operating, \$717,542 84; net income, \$342,462 92.

Of these expenses of operating, \$245,795 65 were for replacements, renewals and improvements. The car equipment is: 13 first-class passenger coaches, 10 second-hand passenger coaches, 10 half-seated passenger coaches, 3 United States postal cars, 4 mail and baggage cars, 1 pay car, 1 wrecking car, 300 box cars in good order, 21 box cars in running order, 23 stock cars, 121 coal cars, 63 flat cars, 16 crank and lever cars, and 80 pump cars.

The road is well managed, officers polite and trusty, and the accommodations very good. The Vice-President and Superintendent, Captain Joseph Jaques, is an indefatigable worker, and to him is due much of the splendid condition of the roadway, the efficient management of the road, and its good financial condition.

The agents at this point are: Frank Ragsdale, local Agent, and John L. Truslow, Ticket Agent.

CLEVELAND.

This pleasant town is situated in a very fine country, thirty miles from Chattanooga, and is the point where the E. T. Va. & Ga. R. R. converges to Chattanooga from its southern determination to Dalton, Atlanta, etc. The town contains considerable wealth, the inhabitants refined and sociable.

ATHENS

is midway between Chattanooga and Knoxville. An old town with a thrifty population, surrounded by a good farming country. Excellent schools, churches, and in a prosperous condition. Has

several manufactories that are doing well.

OTHER TOWNS.

Sweetwater, Philadelphia, Louden, Lenoirs, are all situated in one of the finest farming countries in the world. Above Knoxville, between that place and Bristol, are Strawberry Plains, Mossy Creek, Morristown, Russellville, Jonesboro, etc. From these points immense quantities of the products of farm and garden find their way south annually. The trade consists largely of eggs, butter and poultry, and all the general products of the farm and garden.

The Alabama and Chattanooga Railroad.

This road was constructed in 1869-70-71, by Eastern capitalists, John C. Stanton, of Boston, General Superintendent. It has passed through various hands since completion, and is now run by the Trustees appointed by Court for the foreign bondholders. It traverses a fine section of country, a distance of 295 miles to Meridian, Mississippi. It is destined to become one of the principal roads in the South. Its connections are: With all roads centering at Chattanooga; South and North railroad at Birmingham; Alabama Central railroad at York; Mobile and Ohio, and Vicksburg and Meridian road at Meridian. The road is not in the best condition, having been considerably run down by various changes made in its management. A full description of the depots and other buildings of this road in this city is given in another place. It is one of the shortest routes from this city to New Orleans, and from that point to New York.

For a more extended notice of this road, and also of the WESTERN & ATLANTIC, and the MEMPHIS & CHARLESTON RAILROADS, see pages 86, 87, and 88.

Cincinnati Southern Railway.

As far back as 40 years ago the building of this great Trunk Line was the subject of discussion among those who deemed it of so much importance to the West and South. And when in 1869, the State of Ohio passed an act which enabled the Board of Trustees of the Cincinnati Southern Railway to raise ten million dollars for this proposed road, appeals were made to the Kentucky Legislature for right of way through that State, and after considerable opposition from various sources, it was granted. Real active efforts were now put forth for the first time for the direct route to the South. Armed with these and similar authorities the Trustees proceeded to ask Cincinnati to raise ten million dollars for the work. This she did, and the surveys were made, rights of way procured, and work begun as soon as possible after the preliminaries were arranged.

It would be useless to dilate on this subject, as the benefits to follow the completion of this Grand Trunk Line have been published to the world time and again; still they are not fully advertised. The saving of about one hundred and ten miles in distance; the development of the vast minerals, now dormant; the stimulus given to agriculture and commerce; the building up of new towns along the route, and the various interests to be subserved by those enterprises are of vast importance to Chattanooga and surrounding country.

The construction of the road is progressing rapidly, and the finish of the work is first-class. The Trustees will have no other kind.

The routes adopted after careful surveys are: "The Ridge Route from Cincinnati to Lexington;" "The Military Route;" "The Tennessee Valley Line"—the distance being 336 miles. A portion of this country is rugged, and sparsely settled; some portions traverse as fine country with as thriving and well to do farmers as can be found in any section.

In this connection we copy from the Report of the Chief Engineer (Gunn) on Surveys of the various proposed routes of this road, made to the Trustees in 1873:

"At Emory Junction the Eastern and Military Routes unite and follow the valley along the foot of Walden's Ridge for 76 4-10 miles to Chattanooga. The valley is very level and the summits quite low; a grade of 40 feet per mile is the steepest required, and the work is as light as on a road through the Western prairies. It is very direct, with few and easy curves.

This valley is well settled and contains many good farms. But its chief feature is the heavy deposit of iron ore throughout its whole length, besides the vast beds of coal close at hand in the Mountain. At Rockwood* these minerals have been largely developed. Two fine furnaces are in full operation, and making iron as cheaply, probably, as it is done anywhere in the United States, as the ore, coal, and limestone lie right together. Rockwood is a thriving place, and would furnish a large business to a railroad.

* * * * *

The third route leaves the valley at North Chicamauga Creek, about 13 miles from Chattanooga, and follows that stream to the Tennessee and crosses just below the mouth of the creek. A bridge here would be 1,500 feet long. Traversing the river bottoms, the line crosses South Chicamauga and strikes the Western & Atlantic Railroad near Boyce's Station (six miles, by that road, from Chattanooga and 131 from Atlanta). A connection could

* Roane Iron Company.

be made here for the business of that road. The route then follows along the Western & Atlantic Railroad for three miles, and the East Tennessee, Virginia & Georgia Railroad for two miles, into Chattanooga."

Of the various routes approaching Chattanooga the three spoken of above were adopted.

TOWNS IN THE TENNESSEE VALLEY ALONG THE ROUTE.

On the line of the road in the Tennessee Valley are several towns. Rockwood is the first, on the north, 80 miles from Chattanooga. Here is the center of a vast mineral deposit, and will no doubt be much benefited by the road.

Sulphur Springs, about $1\frac{1}{2}$ miles east of the road is situated in the midst of a fine farming country, and will ultimately reap benefits from it.

Washington is the next town, contiguous to the road, and is four miles distant in an easterly direction.

Smith's \times Roads, through which the road passes, is forty miles from Chattanooga. It is well situated for a town, and some very fine mineral deposits are contiguous to the place.

No doubt new towns will spring up all along this line, and the old places will receive fresh impetus.

PROGRESS OF THE WORK :

About 250 miles grading has been completed, and most of the iron bridges for the same finished and put in place; the masonry for this distance is also about complete. The mountain work is nearly finished, leaving but about eighty-six miles of the easiest grading yet to be done. The contracts are pretty well all let out, and work is progressing finely. It is quite certain that by the first of July, 1877, this great Trunk Line will be opened for business—a saving in distance of one hundred and ten miles! between Chattanooga and Cincinnati.

The Lookout Flour Mills.

were built October, 1871, just opposite and within a few feet of the Alabama & Chattanooga Railroad Depots, on Market street. The building was of brick, three stories and an attic, large, well constructed, with splendid machinery, everything complete, H. C. Chapman & Co., proprietors. For nearly four years the mills were busy and prosperous, when in February, 1875, amid the darkest period of Chattanooga's new birth, when business was entirely suspended to battle the watery elements, the dread fire-fiend descended upon us and reduced this fine piece of property to ashes. Immediately, Colonel M. A. Gee, one of the late proprietors, began their reconstruction on Union street, a

few steps south of the old site. In July of the same year, they were completed, with a better set of machinery, larger capacity, and many other advantages. The engine was built by the Wason Car and Foundry Company, of this city. The proprietors, Messrs. M. A. Gee and W. E. Rockwood, are indefatigable workers, and are building up a fine trade in the country contiguous to this city. When our farmers appreciate the importance of using the best of seed for wheat, and then of thoroughly cleaning it for market, our mills can furnish a larger supply of flour and thus add to Chattanooga's already growing trade.

The Chattanooga Flouring Mills.

were built since the war, by Daniel Kaylor, Esq., an old resident of this city. They were reconstructed out of a building erected by the Government during the war.

These mills have encountered many reverses, from various causes. A lack of wheat has, every year, prevented their usefulness from becoming more appreciated. For awhile, however, these mills made money, and were in a fair way to become largely remunerative. They are situated between the two spurs of the extreme northern points of Cameron Hill, near the Tennessee river. The capacity of these mills is ten barrels per day. The flour made is of a good quality, and finds a ready market. Like the other mills, these also feel the need of a better supply of good wheat. There is no reason why Chattanooga should not become the center of a large flour market. The country around is very favorable to the raising of wheat, and the transportation facilities are constantly increasing, so that the time is not far distant when farmers can market their grain here at as good rates to both consumer and producer as Western markets. The difficulty is simply in the quantity and quality, and this will be remedied sooner or later.

Newspapers and Printing Establishments.

There are two daily newspapers published in the city, and one weekly paper, and three monthly advertising sheets. The COMMERCIAL, Republican in politics, was established in this city in 1873, by the "Commercial Publishing Company," and is now published by that Company. It is a neatly printed paper, at \$6 per year. One of its original founders, Robert S. Kindrick, has died since it was established. Peace to his ashes.

The TIMES was established in 1870 by Kirby & Gamble, and is now published by Patten & Payne. It is Democratic. Daily, \$10, and weekly \$2 per annum. It is the same size as the Commercial. The Times has a very good job office attached, and can turn out some very creditable work.

The TENNESSEE JOURNAL is a weekly Republican paper, established here in February of this year. It is published by Dr. G. A. Gowin, at \$2 per annum.

OTHER PUBLICATIONS.

The GLASS JOURNAL is a very neat little eight page paper, devoted to the business its name indicates. Published monthly by Prof. P. C. Wilson, at 50 cents per annum.

The HARDWARE JOURNAL is an eight page paper, by Vance & Kirby, at the

same price. The last is the PICTORIAL ADVERTISER, by A. Tschopik, gratis.
Job Offices.

Capt. C. W. Baker has a very good office, and has turned out some nice work. His specialty is commercial and railroad printing.

Messrs. Gamble & Griscom have leased the Commercial Job Rooms, and are turning out some very handsome work.

The Times has also quite a well stocked job office, and some very fine material. They have turned out some very creditable work.

DISTANCES BY RIVER.

TENNESSEE (UPPER.)

From Chattanooga to—	
KNOXVILLE, Tenn.	230
LOUISVILLE	205
LEIPER'S LAND'G.	168
LENOIR'S (Mouth Little Tenn).	165
LOUDON	150
KINGSTON	130
ROCKWOOD	110
WHITE'S CREEK	100
EUCHEE	85
PINHOOK (or Sulphur Spg's)	75
MOUTH SEWEE	70
DECATUR, (Stewart's Land'g.)	70
WASHINGTON	65
COTTONPORT	60
BELL'S LANDING	50
HIWASSEE	45
SALE CREEK	30
SODDY	25
BLUE SPRINGS	20
HARRISON	15
CIN. SOU. R. R. BRIDGE	6

(LOWER TENNESSEE.)

BELLEFONTE	95
DECATUR, Ala.	240
FLORENCE	274
TUSCUMBIA	280
GUNTERSVILLE	145

MISSISSIPPI RIVER.

From Chattanooga to—

Columbus, Ky.	1367
New Orleans	1860
Baton Rouge, La.	1620
Vicksburg	2677

OHIO RIVER.

From Chattanooga to—

Louisville	1400
Cincinnati	1550
St. Louis	1040
Paducah, Ky., mouth Tenn R.	800
Cairo Ills	850
Mouth Kentucky River	1629
Evansville, Ind.	1051

DISTANCES BY RAIL.

FROM CHATTANOOGA TO—

NEW YORK	852
Washington	624
Philadelphia	734
Richmond	687
Norfolk	6 0
Petersburg	569
Baltimore	664
Bristol	242
Knoxville	112
Athen	40
Cleveland	30
MEMPHIS	310
Corinth	217
Tuscumbia	265
Decatur	122
Huntsville	98
Stevenson	39
New Orleans	652
Little Rock	445
Hot Springs	510
Dallas, Tex.	812
Mobile	425
Montgomery	414
Selma	276
CHARLESTON	449
Savannah	556
Macon	340
Augusta	311

FROM CHATTANOOGA TO—

ATLANTA	140
Marietta	118
Cartersville	91
Kingston	80
Ringgold	24
Rome	80
CINCINNATI	446
Louisville	336
Bowling Green	251
St. Louis	476
Cairo, Ills.	192
Columbus, Ky.	182
Hickman, Ky.	320
NASHVILLE	151
Murfreesboro	114
Shelbyville	1 9
Sewannee	88
Decherd	69
Cowan	64
Tullahoma	82
McMinnville	127
Bridgeport	27
MERIDIAN, Miss.	295
Tuscaloosa	198
Birmingham	143
Sulphur Springs	31
Rising Fawn	26
Trenton	18

SHEEP CULTURE IN EAST TENNESSEE.

The raising of sheep in East Tennessee has just about commenced. In years past, it was not thought worth while to pay much attention to this industry. But since the passage of the dog law, and the consequent saving of much stock, sheep-raising has received fresh impetus. Here, in Hamilton county, a great many are becoming impressed with the profits and the comparatively cheap sustenance of sheep. In this connection we introduce an article from Col. Tom Crutchfield, extensively used by those wishing to encourage this branch of industry in East Tennessee. Also, extracts from an address by Col. J. B. Killebrew, Commissioner of Agriculture, Mines and Statistics for Tennessee, before the Stock Breeders' Association. Both articles are standard authority. Col. Crutchfield says :

In 1864 I bought twenty scrub ewes and bred them until 1865 to a merino buck, saving the ewe lambs and breeding them until 1869 to one of Robert W. Scott's improved Kentucky bucks, saving the ewe lambs from this crop and breeding them to a Cotswold buck. Annually I would cull the flock, throwing out all the ewes that were deficient in form or fleece, and saving only the best ewes to breed from, and continued to breed to Cotswold bucks to the present time, disposing of my wethers and culled ewes for mutton. I change bucks every two years, and never breed my buck back to his own lambs.

During the time I have purchased some Cotswold ewes, and bred them to the same Cotswold buck; to-day the offspring of the Cotswold ewes bred to the same buck are superior, either in form, carcass or fleece to those bred originally from the scrub. My best ewes, those that bring me the best lambs and yield the most wool, can be traced back on the mother's side to the native. I have bred for the largest carcass and the greatest yield of wool. My first cross, Merino upon the scrub, not only increased the wool above the scrub, but made it much finer and more dense, and covered the bellies and naked places of the scrub. My cross then to the long-wooled bucks gave me the length requisite for combing wool, and the large carcass for mutton, and still retained the hardiness of the scrub and Merino, and the density and softness of the Merino in fleece. My flock is now, and has always been, healthy.

I market my culled ewes and weathers for mutton in April or May after shearing, in our own market, at from five to seven cents gross, they commanding a better price than the ordinary sheep, because they gross less and are better mutton; they have averaged me for wool and mutton from ten to twelve dollars each. For several years I have sold the buck lambs at weaning time, July and August, and some ewes to be bred from, at prices ranging from ten to twenty-five dollars each, and could not supply the demand.

Since 1870 I have marketed my wool in Boston, at prices ranging from forty-two and a half cents to seventy cents per pound, unwashed, free from burs, tags, etc.

You may ask why I go so far from home to sell my wool. Simply because

I have been able to get better prices—I presume because I come nearer the consumer—manufacturer. I had a fine clip, 695 pounds, in 1870; I exhibited samples to the wool-buyers of Chattanooga, telling them the amount I had, they offered me thirty-eight cents per pound. I sent samples of the same to a wool commission house at Nashville, McCrea, I believe, and was offered forty-three cents. Seeing in the "Country Gentleman" the advertisement of C. E. Haygood & Co., wool commission merchants, Boston, Massachusetts, I sent to them samples of the same, asking its market value; they replied: "If your wool comes up to the sample, it is worth in our market seventy cents." I shipped to them, and they sold at that price to the Valley Worsted mills, of Providence, Rhode Island, it having reached the manufacturer through one "middle-man" only. It paid freight, which is now less than one cent per pound, insurance, commission, etc., and netted me sixty-five cents. The same factory has bought my wool ever since, and it ranks as equal to the best Kentucky combing. I usually get mine to market, on account of our early seasons, a month before the Kentucky clip comes in.

I have shipped this spring 662 pounds (exclusive of belly wool and tags,) clipped from seventy-five head, about fifty of which are ewes with lambs by their sides.

AS TO FEEDING.

My bucks are taken from the ewes about the first of December, and are lotted to themselves, getting extra attention (going back to the ewes about the middle of August), the balance of the flock runs upon the winter grazing oats all the winter and until the middle of March or first of April. This spring they were not taken off the oats until the first day of April.

If, during the time, they are grazing on the winter oats, there is a great deal of rain, and the ground becomes soft, they are removed to the meadows, or grass lot where there is a sod, and taken back to the oats as soon as dry enough. When taken from the grazing oats in March or April, in order that it may mature its crop of grain, they are turned to orchard or blue-grass lots until June or July, when they go either to the meadows, or the oat fields after harvest, where they remain until turned to the grazing oats again, in October or November.

They are fed no grain or hay, unless the ground is covered in snow, or an extremely cold spell, freezing up everything. In February or March, when the ewes are lambing, I take them close to the house, where I can watch them and care for their lambs. (This season fifty-two ewes have brought me seventy-nine lambs. I have sixty now living, have sold and delivered three and their dams, have lost two that came alive, one of which bled to death from docking, and have lost fourteen that the ewes could not deliver, principally twins and triplets.) When lambing, if they are limited in pasture, they receive an occasional feed of shelled oats or corn, as it may be needed. I have had trouble this season by my ewes being too fat, and being unable to bring forth their lambs.

My entire herd have access to open shelter and salt all the time.

Since 1864 I have invested—

For ewes.....	\$130 00
For bucks.....	220 00
Total.....	\$350 00

Since 1866, I have sold—

For breeding and mutton, over.....	\$1,800
For wool.....	1,500—\$3,300 00

I have on hand 78 sheep—

76 ewes and wethers, mutton price \$10.....	\$760 00
2 bucks, cost.....	75 00
60 lambs, at \$7.....	420 00

Deduct original cost.....	\$4,555 00
	350 00

Deduct cost of keeping, an average of seventy-five head for ten years, at \$2 each.....	1,500 00
	1,705 00

Or a net profit on the amount originally invested in 1864 of over sixty per cent. per annum.

The ewes and wethers are valued at about what they would bring for their wool and mutton: the lambs at seven dollars each, about one-half of which are buck lambs, and will be sold at from fifteen to twenty-five dollars each; (fifteen of them are now engaged.) But suppose they are not sold for breeding purposes, and are kept simply for wool and mutton, next April or May they will clip an average of ten pounds of wool each, which,

If sold at 35 cents.....	\$ 3 50
And weigh from 120 to 150 pounds, say 135, at five cents.....	6 75

Deduct for keeping, etc.....	\$1 50
Deduct ten per cent. loss.....	1 00

And they will pay.....	\$7 50
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I now have 78 sheep—

Ewes 68, wethers 8—76 at \$10 each.....	\$ 760 00
Bucks, 2 at cost.....	75 00

Cost of keep 12 months, \$1 50 each.....	\$ 835 00
Ten per cent. losses.....	117 00
One per cent. taxes.....	83 50

	8 35
	\$1,043 85

I have from them in wool—

Shipped to Boston.....	662 pounds.
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Gave to the servants three fleeces	26 pounds
	688 at 35 cents....
60 lambs at \$7 each.....	420 00
	\$660 80

Or over sixty per cent. upon the investment.

In my former estimates I have allowed two dollars per head per annum for keep, etc., when I had not the grazing oats; now I have allowed one dollar and a half per annum for keep, etc., while I am satisfied that the droppings of the sheep and cleansing of the meadows would pay their way. They graze the meadows in the summer after mowing, keep down noxious weeds, trumpet-vine, sedge, etc., until frost, when these pests cease to grow; then they are taken to the grazing oats, and the tame grasses in the meadows and pasture lots put forth with every mild season during the fall and winter, to be grazed only when the oat-field is too soft to allow the sheep to be on it.

I had nearly forgotten to say anything about the everlasting dog, (the only serious obstacle to successful sheep husbandry). My losses by the dog for several years have been nothing. I have two good shepherd dogs and two bull dogs well trained to guard the sheep against dogs, and the double-barreled shot-guns are always ready. I prohibit hunting on the farm. If a stray dog shows himself, any and all employees are instructed to quit work and get that dog. A standing reward of fifty cents is paid for each scalp—but a few days since I added the twenty-fourth scalp to the string.

In what I have written I do not wish to be understood as giving preference to the cross-breeds or high grades over the full-bloods; by no means; but this the cost—to a majority of farmers is too great to commence with a flock of full-bloods, except on a very small scale, while with a small outlay they can commence with a good-sized flock of natives, using a full-blood buck, and soon grade up their flock to produce them as much, or nearly so, of wool and mutton, as the full-bloods; and also a flock thus graded up would be healthier than a full-blood flock.

Nor do I believe that sheep husbandry on a large scale will pay so good a profit, from the simple fact that the same attention can not be given them, nor would they be as healthy unless the pasturage and range was proportionate.

I am of opinion that the greatest profit from sheep can be realized by the farmer giving his attention to what he can handle with ease, and properly, in connection with the other duties of his farm.

Every farmer can take care of some—some more than others—and what will be consumed by them will scarcely be missed, yet the aggregate increase in the production of wool and mutton would be immense; and hence the industry being more diversified, the greater importance for protection against the prowling dog.

But, let the flock be large or small, it must have attention, and not be allowed to "root hog or die."

* * * * *

AMNICOLA, Near Chattanooga, Tenn., May 9, 1876.

TOM CRUTCHFIELD.

Address by J. B. Killebrew.

Mr. President and Gentlemen of the Stock Breeders' Association:

* * * * * Here in Tennessee we have a combination of physical agencies that develops the highest types of animal life. The inscrutable agencies of climate, water, soil; the happy effects of variety of food; the influence of mountain heights, extended plains, salubrious air; the abundance of mineral substances, that go to make up the bony structures of the animal—all these, and many more, may be mentioned as a few of the excellencies which the State enjoys generally. These natural forces, or agencies, exist everywhere in the State, and it is for you to determine how they may be so utilized as to confer wealth upon her people. Time will prove that the grasses which are the indigenous product of our soil, and which spring up spontaneously where the forests are cleared and the sunlight let in upon the soil, are the most essential and the most remunerative of all our crops.

Take every division of the State, and consider, if you please, the wonderful adaptation of the soil and climate for the production of stock. Here is the point where the excellence of both sections, North and South, overlap. We grow grasses equal to the States north of us, and much better than those south, while our climate is less rigorous than that of the Northern States, and less enervating than that of the gulf tier; and yet our soils and our climate are so diversified by elevations, by trend of mountain ranges, by variety of geological formations, that within certain limits we may be said to enjoy the climate and soil of almost every State in the Union.

Beginning on the east, we find two thousand square miles covered by a double range of mountains, the summits of which, often treeless and bald, attain an elevation of over six thousand feet above the sea. These mountain ranges send out from either side innumerable spurs, which interlock, and between which lie fertile coves and rich pasture lands, where the grasses grow in summer with almost a tropical luxuriance. And even upon the slopes and tops, where the granite soils prevail, rich, black, and friable, herd's grass springs up spontaneously, and supplies food throughout the summer to a large number of cattle, sheep, and horses. Blue grass, too, as incredible as it may appear, flourishes upon the balds, clothing the surface with its dark verdure, upon which cattle luxuriate until their surloins fairly roll in fat. Nowhere on earth are there richer pasture-grounds than upon these "balds." Blue grass, herd's grass, white clover, red clover, nimble will, Randall grass, or evergreen, mountain meadow, and a beautiful, soft, velvety grass, of a deep green color, and so very thick that it covers the ground like a green Brussels carpet—all these supply a succession throughout the season, from the first of April until the first of October, after which time the rigor of the climate checks the growth. The co-terminous valley lands, and southern coves, however, supply grazing a month or two longer.

For sheep-walks this mountain region has no superior in this or any other country. Not even the fertile plains, and rolling heights, and mountain fastnesses of the Spanish Peninsula, are better suited for sheep-growing. Here they may be protected from the cold blasts of winter by the sheltering coves;

and the fierce rays of a July sun are tempered by elevation, and by the gentle winds that play with refreshing coolness about the mountain tops. In early spring, in the coves which look out southward, vegetation is quickened into life by the direct rays of the sun, aided by the absorptive power of a black soil, while the northern slopes, rich in plant-food, remain green with forage the entire summer. From the head of nearly every cove issues a spring of pure, soft water, which, in its rapid descent to the valleys below, unites in fraternal embrace with other streams, until the surging volume, leaping, and roaring, and dashing over precipices, makes the air melodious with the sound of many waters. Bordering these streams are laurel brakes and ivy thickets, with hemlock, holly, rhododendron, and wild honey-suckle, so dense that the rays of the sun are completely shut out as under the roof of a house. The borders of these thickets supply a safe refuge from the summer's heat, as well as protection from the winter's cold. Nor must it be forgotten that flies, which are so troublesome to stock upon lower lands, never appear to vex them on these mountain heights. The native sheep, as might be expected from the of the soil and purity of the atmosphere, enjoy exemption from rot, dysentery, and other diseases so common among flocks in a low flat region. The production of wool in this division is considerable, and the quality is highly esteemed. It is white, soft, elastic, fine, lustrous, and true—that is, not breachy—but of uniform fibre, with an abundance of yolk. It sells throughout East Tennessee for five or ten cents more per pound than the valley-grown wool, and is known in the market as "Watauga wool."

We regret a want of space precludes giving the admirable address of Mr. Killebrew entire—the above extracts being but a very limited part of it. Enough is produced in these pages on sheep culture, however, to justify the assertion that no better section can be found than this for this branch of agricultural pursuits.

Will it Pay to Come to Chattanooga?

The following letter was written by a Northern man, who has lived long enough among the people of this section to judge of their habits, disposition toward newcomers, and the soil, climate, etc. One of our merchants here, Dr. M. Block, is interested with Mr. Trepanier, and they together are engaged principally in grape growing. The wine made from these grapes is pronounced very fine, and like other wines made of grapes grown in this vicinity, have engaged the attention of many who know the difference between wine of an ordinary, and that of a superior quality. The letter will speak for itself in its plain, terse way:

"SUNNY SIDE, June 20, 1876.

MY DEAR DOCTOR.—You ask me if you could safely recommend our section of the country to immigrants, and if men of small capital could succeed on the knobs of the Chickamauga Valley, especially should they desire to engage in the culture of fruit and the vine. To this query I can only answer by giving you my experience. In the winter of 1870 I bought one hundred acres of

land of what is called the thin, knobby, chertz land east of Missionary Ridge, between the Shallow Ford and Bird's Mill roads, five miles from Chattanooga. The improvements on the place consisted of an old log house, and twenty acres cleared land, which was completely exhausted by ten years' successive cropping in corn, without the return of a single handful of fertilizers. There was not a good panel of fence on the place. I had never been a farmer; in fact, I had never done one hard day's manual labor. The purchase of the place, a horse and wagon, a cow, and a few necessary farming implements, exhausted my meagre capital. Now I must make a living and improve the place; so I rolled up my sleeves and went to work with a will. Here is the result of my efforts during the six years of my farm life. I have cleared thirty acres; have now eighty acres under substantial fence, besides several cross fences; have built a barn that will compare favorably with the best in the county, and some other outbuildings. I have seven acres in grape vines, mostly Concord, and as many in apples, peaches, pears, cherries and quince, all bearing abundantly of as fine fruit as I have seen anywhere.

I have made good corn and wheat, and the best of Irish and sweet potatoes, turnips, and all garden vegetables grow to perfection. To attain this result I have plowed deeply, saved all the manure I could, and expended my capital freely, the latter consisting mostly of system, pluck, perspiration and "elbow grease." Should any man wish to invest in the same way, the field is large and the result certain. Should any apply to you for information in regard to our section, send them over, Doctor; I am always ready to show our county to strangers, to point out the most eligible location, and do all in my power to help them in selecting a home among us.

They will find the people courteous, hospitable and obliging, ever ready to greet strangers, who come with the intention of settling among us as useful and respectable citizens, whatever may be their religious or political opinion.

Yours, truly,

P. F. TREPANIER.

Dr. M. Block, Chattanooga.

We have only to add that this testimony could be enlarged to a great extent; there are but few instances in which the result to new-comers in our midst has not been all that could be desired. A hearty welcome is extended to all who wish a home in this delightful section. The German, French, Italian, Swede, Irish will all find some few of their countrymen in our midst, all doing well as farmers, gardeners, grape growers, dairymen, &c., &c., who will greet them with true hospitality and assist them in making selections for locating.

The people here in the rural districts are plain, clever, people, and are ever ready to welcome all who come in good faith. Lands are remarkably cheap, and plentiful, and just awaiting the plow and shovel of the husbandman to make them bloom and blossom with the grasses and cereals; and the vine to droop heavy with the rich clusters of grape.

Agricultural Products.

Corn, wheat, oats, barley, beans, peas, tobacco, the different grasses, broom corn, sorghum, cotton, potatoes, sweet potatoes, and almost every variety of produce can be cultivated with success. Certain localities are better adapted to certain crops.

Corn yields most on the first bottoms, where seventy-five to one hundred bushels per acre can be raised. Corn is also cultivated on all the other classes of lands.

Wheat is raised to the best advantage on the second bottom and table lands, yielding from fifteen to twenty-five bushels per acre.

The grasses, especially timothy and herd-grasses, are very successfully cultivated on the first and second bottoms, yielding from one and a half to three tons per acre.

Clover grows too rank on the first bottoms, but does finely on the second bottom and uplands, yielding two to two and one-half tons per acre.

Cotton, although not receiving so much attention as formerly, has been very successfully cultivated in the county.

Tobacco is grown principally for home consumption.

Potatoes (the Irish potato, so called), do not yield well in the valleys, except for early use, but they grow to perfection on the table-lands. Potatoes grown on Lookout Mountain and Walden's Ridge have all the flavor, dryness and "keeping qualities" of any produced in Northern climates. Their cultivation, in the localities named, for the home and Southern market can be made the source of much profit.

Sweet potatoes do well in the valleys. The other products named can all be cultivated successfully.

Garden vegetables of all kinds, except cabbage, do well, but are not produced in sufficient quantity to supply the Chattanooga market. Their production for this and the more Southern markets would be a permanent and remunerative business.

Horticultural Products.—Apples, peaches, pears, apricots, quinces, cherries, grapes, plums, berries and figs are produced in the county. The most of these do well. The lower bottom lands are not adapted to fruit culture, but the uplands and table-lands are.

The apple does not do so well here as in a more Northern climate. This fruit does not keep well.

The peach is regarded as well adapted to this climate, but the nature of the fruit, and the proper manner of taking care of the

tree, must be well understood in order to make it equal, in quality and yield, to that of more Northern localities, where its cultivation is a study.

On Walden's Ridge and Lookout Mountain apples grow very fine. Some qualities are capable of being kept as long as those grown anywhere. This has been tested in a limited way only; but enough is known to justify the assertion that no better country exists than the table-lands for fruit-growing. But, of course, it must be in a locality with the necessary condition of atmosphere, climate and soil. This can be found in many places. The lands can be bought at from one to five dollars per acre on the summit. Sand Mountain is excellent for fruit also.

Manufactures in Process of Construction.

The advantages of nearness to coal supply, water, timber, &c., that Chattanooga enjoys, is attracting the attention of capitalists, more than ever before, and as a consequence, manufactures of various kinds are being erected here, or are in contemplation.

The Tennessee Iron and Steel Company

This enterprise was established in this city in June of this year, and as soon as material could be had the construction of the necessary buildings begun. The stockholders have elected the following Board of Directors, to hold until January, 1877, when the first annual, regular meeting will be held. The following are the Directors: Lewis Schosfield, Sr., O. L. Packard, Lewis Schosfield, Jr., J. W. James, J. W. McCrath.

President, Lewis Schosfield, Sr.; O. L. Packard, Treasurer and Agent; L. Schosfield, Jr., Secretary and Assistant Manager.

It is proposed to manufacture a first-class article of merchant and bar iron rail splices, etc. The facilities will be all that is desired. The machinery is of the latest and most approved order, and is now being put in place at the Company's works on James street.

The machinery is all of the best quality with new and improved patterns. The engine is 106 horse power, made by F. D. Crummer, Detroit Michigan. The boilers were made by the Erie (Pa.) Iron Works; a small mill train by J. L. Lewis, Pittsburgh, also an improved steam shear; the bar mill was made in Atlanta, Ga.

This is another one of those evidences of our superior advantages in iron manufacture, and is destined to become, it is hoped, one of Chattanooga's large and important enterprises. Mr. Louis Schosfield, Sr., has had a partiality for Chattanooga for a number of years. About twenty years ago he predicted that this would

be the place for rolling mills, iron works, etc. He then desired to locate here, but was overruled by interested parties and constructed a large rolling mill at Atlanta, Ga. After all these years of prosperity, and, latterly, of misfortune owing to the over-production of iron, dearness of fuel, etc., he comes to Chattanooga knowing that he has at last found the place that contains all the elements for a decided success.

The works are constructed on the Nashville, Chattanooga & St. Louis, and Alabama & Chattanooga Railroads, convenient for loading and unloading.

The Chattanooga Tannery.

Messrs. J. B. Hoyt & Co., have about completed the main part of their large tannery, on the Tennessee river banks, near the blast furnace. This extensive industry is backed by capital and experience, and is destined to become one of the largest enterprises of which we may justly boast.

The dimensions of the works so far constructed are: Yard and beam house building, 340 by 42 feet; bark mill, 52 by 32; bark sheds, 140 by 40, and 140 by 56—to be increased 40 feet in length. The engine is a 40 horse. The stack, now completed, is 70 feet high. It is proposed to add to these buildings from time to time, until the tannery shall be one of the largest in this section of country. The Company owns some twenty acres, which is fenced in, and through which is a side-track from the rolling mill switch, running up to the yard and beam house building. The machinery will be of the latest and most improved kind, and is now being put in, preparatory to starting up in September of this year. This Company will do only tanning; their leather will be prepared completely here for the curriers' hands.

Waters & Co's Saw Mill.

Messrs. O. E. Waters & Co. are just completing a large saw mill, just above the rolling mill, on the river. This mill is substantially built, above high water mark, and will have a sawing capacity of — feet per day. Being on the river and near the side-track of the rolling mill, they may enjoy all facilities for getting stock, and shipping on cars without much extra drawing with teams.

Another Enterprise.

The Dayton Saw Works are about establishing in this city a repair shop for all kinds of saw and mill machinery. This is preliminary to the erection of their extensive manufactory of saw mill machinery this year. They are practical men, with capital

and energy, and have selected Chattanooga as a most favorable spot for a manufactory of this character. They are eminently right—the more the better, for all concerned.

THE CHATTANOOGA, KINGSTON AND KNOXVILLE PACKET COMPANY.

Recognizing the fact that by a combination of capital and energy, and a united effort in the direction of system, regularity and uniformity in freight and passenger tariff, the steamboat business could be made more profitable and satisfactory, a company has been formed in this place with the above title. The owners and masters of the following steamers plying on the Tennessee River and its tributaries form the company: The "R. M. Bishop," "J. T. Wilder," "City of Knoxville," "R. C. Jackson," "Lucy Coker," "Ida" and "May Bell." A charter has been applied for and the company formed, stock taken, and officers elected: Jos. Glover, Superintendent; W. P. Kindrick, Secretary and Treasurer. The Company's office will be in this city, and agencies will be made at other points whenever necessary. Among those who compose this Company are some of the oldest and trustiest river men: Captain W. C. Henegar, Robt. Allison, Jesse B. Allison, J. B. Lowry, etc.

Mail Boats.

The Company will carry the mail to Rockwood, 110 miles from Chattanooga, on the Tennessee river. Boats will run regularly in this line, and depart on time—thus giving an assurance of regularity and punctuality in this important means of transportation.

The river trade is destined, under this new arrangement, to become of much more importance than heretofore. With the improvement of the river, the wharf improvement in this city, and the proper management, this Company can become very useful to those living on the line of the river, and its many tributaries.

PRINCIPAL TOWNS NEAR CHATTANOOGA.

South Pittsburg.

An English Company of capitalists, "The Southern States Land, Coal and Iron Company," have purchased a large lot of lands, including coal and iron, at Battle Creek twenty miles from Chattanooga, and twelve miles from Jasper, for the purpose of building extensive iron works. The spot selected for a town is one of many advantages, in point of healthfulness, nearness to market, and the plentiful supply of coal and iron. The Company have laid off a town into lots, are erecting buildings for business and residences, laid off

streets, and are making all the necessary preparation for a town. A boarding house of about twenty rooms with all modern conveniences, and in a very substantial manner, bespeaks their good sense and forethought. It is proposed to encourage the building up of this new "Pittsburg of the South," by all honorable and legitimate means. The amount of money expended in advance of any improvements, has encouraged the people of that section to look for some handsome developments ere long. The country contiguous is favorable to agriculture—the land is very fine, well watered and timbered, and produces in splendid quality and quantity; while the mountains and ridges all around the new town, and contiguous, are full of mineral wealth. This development will be of considerable benefit to Chattanooga, as this is the central iron market of the South, and is fast becoming recognized as the focus around which will congregate all kind of manufactures—more especially of iron.

Our merchants and business men should encourage trade in that direction as it will one day be an important item to them.

Jasper.

This is the county seat of Marion county—a place of about 500 inhabitants—situated six miles north of the Tennessee river, in Sequatchie Valley. Jasper is a very old town, and from it has emanated some of Tennessee's finest scholars and noblest women. The town has been much neglected since the war, until very recently, when the few remaining inhabitants determined to make an effort to redeem it. There are few business houses, but some very nice residences, and the people are clever, sociable and well to do. The Valley Herald is the name of a very good little weekly paper published at this point. A railroad runs to this place from Chattanooga, a distance of thirty-seven miles, and the extension eight miles above Jasper, up the Valley, is progressing. This will add considerable to the trade. The best of bottom and upland can be bought around Jasper at from \$5 to \$25 per acre.

The Towns of the County are mentioned in their appropriate place, as also are those contiguous to Chattanooga on the lines of the Railroads.

Chattanooga as a Manufacturing Point.

Chattanooga possesses all the elements necessary to make it a great manufacturing center.

1. It has a healthy location and a salubrious climate.
2. It has ample facilities for transportation and distribution.
3. Its market for all manufactures is near and large, and the demand constantly increasing.
4. It is immediately surrounded by all the materials, inexhaustible in quantity and superior in quality, which enter into the production of the leading manufactures.

With reference to the manufacture of iron, the advantages are so unusual that it seems as though nature, in the combination of the material elements here made by her hand, intended this point to be the great center for its production.

Chattanooga, situated near the Alleghany coal fields, possesses the element first in importance in the economical production of iron, viz: good coal, abundant and cheap.

Veins of iron ore underlie the very city, divide the surrounding hills, and stretch away into the regions beyond, side by side with the veins of coal.

In juxtaposition with the coal and iron are found the sand-stone and fire-clay necessary to the construction of furnaces, and the limestone necessary for the smelting of the ores. Over these treasures grow forests of valuable timber. These wonderful mineral deposits have already attracted the attention of manufacturers and capitalists, both in this country and in Europe, and large investments have been made and important enterprises organized.

The cost of transporting the iron ores to the manufacturing centers of the Northern States, and the changed condition of the coal supply in England, will make Chattanooga, in no distant future, the Pittsburg of the South, and the Birmingham of America.

The cost of the production of pig iron in the vicinity of Chattanooga, whether by hot or cold blast, and whether with charcoal or coke, ranges from \$15 to \$25, the average being below \$18. The result depends somewhat upon surroundings, but more on scientific knowledge and judicious management.

The above is taken from the "Resources of Tennessee." Since that article was prepared, several changes have taken place. Iron is made somewhat cheaper than in 1873—the Chattanooga Iron Works are turning out a superior quality, at rates that justify us in stating that as a point for manufacturing this important staple, Chattanooga cannot be excelled. The cost of production of pig iron is not more than at other points, and not so much as at others. Chattanooga received her name—"Pittsburg of the South"—because of her superior advantages for making iron. When this becomes thoroughly known, nothing can keep her from realizing the full benefits of the riches of nature's handiwork.

STYLE OF MANUFACTURES, NO. HANDS EMPLOYED, ETC.,
IN CHATTANOOGA.

NO. HOUSES.	STYLE OF MANUFACTORY.	NO. HANDS EMPLOYED.	ANNUAL SALES.
2	Agricultural Implements	5	\$ 2,000
1	Blast Furnace.	25	275,000
1	Boilers and Sheet Iron.....	5	7,000
2	Brass Foundries.....	5	4,000
1	Barrels.....	2	500
3	Brick.....	75	210,000
1	Car Works.....	35	100,000
1	Candy	3	15,000
3	Carriages, Buggies & wagons..	20	34,000
1	Cigars.....	3	3,600
2	Contractors and Building	40	100,000
2	Cornice.....	13	65,000
3	Furniture.....	12	15,000
1	Foundries.....	6	5,000
1	Foundries & Mach. Shops.....	15	12,000
1	Fire Brick Works.....	23	30,000
1	Gas Works.....	5	10,000
1	Ice Factory.....	4	10,000
3	Mills, corn.....	2	150,000
2	Mills, flour.....	15	290,000
1	Marble Works.....	2	10,000
2	Mineral Water.....	5	25,000
1	Railroad Rails.....	500	1,650,000
3	Planing Mills.....	30	55,000
3	Printing.....	40	36,000
1	Pumps and Piping.....	10	50,000
4	Saddlery and Harness.....	10	14,000
1	Wood Turning.....	2	3,000
1	Yawl and Skiffs.....	4	1,000

Making the number of hands worked, 916; annual sales \$ 3,169,500.

The above figures are, in the main, correct. When applied to the larger works they may be invariably relied upon—some of the smaller are placed under rather than above the capacity, or annual sales. This does not include many of the minor manufactories, such as boots and shoes, etc. In these estimates it is simply designed to give some idea of the manufactories of Chattanooga at present. It is safe to say that with those at present under construction, the next year will witness a considerable gain. For a city of 12,000 inhabitants, under all the circumstances, it can with impunity be said, that this cannot be excelled by any city of equal size.

The Memphis and Charleston Railroad.

This road was built to Stevenson, Alabama, in 1856, simultaneously with the completion of the Nashville & Chattanooga

Railroad. It penetrates the great Mississippi Valley, and in its connections and ramifications extends over a distance of three hundred and twenty-eight miles, uniting Chattanooga and Memphis, as it were, with an iron clasp.

ITS CONNECTIONS:

At Memphis, with Memphis & Little Rock; Mississippi & Tennessee, and Memphis & Louisville Railroads, and with Mississippi, White and Arkansas rivers steamers. At Moscow the Somerville branch diverges. At Grand Junction with New Orleans, St. Louis & Chicago Railroad. At Middleton, Junction of Ripley Railroad, narrow-gauge. At Corinth with Mobile & Ohio Railroad. At Tuscumbia the Florence Branch diverges. At Decatur with Louisville & Nashville and Great Southern Railway. At Stevenson with Nashville & Chattanooga Railroad. At Chattanooga with East Tennessee, Virginia & Georgia; Western & Atlantic, and Alabama & Chattanooga Railroads.

The Western and Atlantic Railroad.

This important link between Chattanooga and Atlanta, Ga., a distance of 138 miles, is leased from the State of Georgia by a Company of gentlemen, with the following officers:

Joseph E. Brown, President; E. W. Cole, Vice-President; W. C. Morrill, Secretary and Treasurer; Wm. McRae, Superintendent; B. W. Wrenn, General Passenger Agent; D. W. Apple, General Ticket Agent; C. W. Anderson, General Freight Agent, Nashville; and R. A. Anderson, General Freight Agent, Atlanta.

CONNECTIONS OF THE "KENNESAW ROUTE."

At Chattanooga, with railroads diverging; at Dalton, with East Tennessee, Virginia and Georgia, and Selma, Rome and Dalton Railroads; at Kingston, with Rome Railroad; at Cartersville, with Cherokee railroad; at Atlanta, with Macon & Western, Atlanta & West Point, and Georgia Railroads; at Newnan, with Savannah, Griffin & North Alabama Railroad; at West Point, with Western Railroad of Alabama; at Opelika, with Savannah and Memphis and East Alabama and Cincinnati Railroads; at Chehaw, with Tuskogee railroad; at Montgomery, with Mobile and Mantgomery; Montgomery and Eufaula, and South and North Alabama railroads.

The road is in good hands—that is to say, they have first-class equipments, make close connections, have all the conveniences and comforts of a good road, and have the reputation of treating travellers with every courtesy. Their trains are all equipped

with the Westinghouse air brake, thus affording a safe means of stopping immediately.

The Alabama and Chattanooga Railroad—Continued.

The Trustees for the bondholders are: David A. Wells, Robt. H. Smith, W. D. Dunn. The officers at this point are: Charles P. Ball, General Superintendent; F. L. Wadsworth, Assistant Superintendent; R. A. Bacon, General Freight and Passenger Agent; H. W. Crittenden, Auditor; John McVey, Superintendent motive power and shops; Thomas I. Hewlitt, Superintendent Telegraph.

The status of this road will not appear in these pages to any great extent. It has been sold several times, and is now ordered by the District Court, of Alabama, to be sold in October of this year—the bondholders having, so far, failed to pay the purchase money, as per terms of last sale.

PART SECOND.

HAMILTON COUNTY.

EARLY SETTLEMENT AND COUNTY SITES.

Hamilton county was formed out of Rhea in January, 1820—the treaty with the Indians being concluded in the latter part of 1819. It took its name in honor of ALEXANDER HAMILTON, the then late Secretary of the Treasury of the United States. The first court was held at the house of HASTEN POE, fifteen miles above Chattanooga. This body had criminal and law jurisdiction to a certain extent. The Justices, elected by the Legislature, were: Robert Patterson, John Cornett, John Hammet.

There were two parties in the county struggling for the ascendancy, known as the Riddle party and the Rawlings. The free negroes held the balance of power for awhile, and no little wire-pulling was resorted to by the partizans of each clique to control this element.

In 1840, A. G. W. Puckett, in obedience to the majority of the electors of the county, as by legislative act provided, removed the court to the south side of the Tennessee River, where a town was laid out and public buildings erected. This place was called Harrison, in respect to Gen. W. H. HARRISON, a distinguished soldier, and afterwards President of the United States.

In 1870, pursuant to an act of the Legislature, the county voted upon the question of removing the county site to Chattanooga. A majority voting in favor of the proposition, it became the duty of the Chairman, A. G. W. Puckett, to adjourn the court to this place, which was accordingly done.

EXTENT AND AREA OF THE COUNTY.

The County adjoins, and is north of, Latitude 35° , the boundary line between Georgia and Tennessee, and between Longitude $85^{\circ} 9' 25''$ west from Greenwich and $85^{\circ} 30'$ east. It extends over a territory of 645 square miles, or 263,600 acres. It is bounded on the north by Rhea county; east by Tennessee River and James county; south by State of Georgia; west by Marion, Sequatchie and Bledsoe counties. The shape of the County is irregular—the southern line being twice the length of the northern. The following are the principal towns in the county:

Tyner's Station.

A small village on the East Tennessee, Virginia & Georgia Railroad, nine miles east of Chattanooga, with a good county (public) school, store, post-office, &c. Fine farming country around, mostly upland, well watered, and lands very reasonable.

Chickamauga.

A station on the Western & Atlantic Railroad, south of Chattanooga twelve miles. Has a store, post-office, depot, &c. Good farming lands in vicinity, and reasonable in price.

Harrison.

This was formerly the county site of Hamilton county. It is a very old place, and contains several stores, hotel, post-office, blacksmith shops, and an excellent Academy for young men. A healthy section of country, and well watered and timbered.

Chattanooga as a County Seat.

The advantages Chattanooga possesses in being a county seat, are many. Besides compelling all the courts to be held here, thus bringing many of the people of the county to town, from time to time, it also adds to our number of buildings, brings trade that would otherwise not come, and concentrates all the interests of the county where it rightfully belongs, namely—where the brains and capital, and population of the county are in preponderance. The advantages to the county are none the less numerous or important. With a large number of the court residing here, all having interests at stake; with a place of safety for the records; with a city having advantages of railroads and river transportation extending out in almost every direction over the county; good roads traversing the county—all combined, make a large showing in favor of the whole territory. But the principal mutual advantage to this city and county is in having the judiciary and financial management of affairs right among those who are mostly interested. As to actual cash values, the city possesses more than all the balance of the county combined. As to population, fully half, if not a little more than this proportion, and as to ability, learning, educational facilities, newspapers—indeed, all that is valuable to the proper conduct of a county's business, the city largely exceeds the former. Certainly, then, the advantages to Chattanooga are a large item.

Population, Valuations, Wages

In 1820, when the county was first organized, the United States census gave it a population of 821, of which 55 were colored. In 1870, according to the same authority, there were 17,241, of which 4,188 were colored. The estimate placed upon the population at present is based upon sources not exactly official, but reliable: it is placed at 25,000. The increase in population is not so rapid as it might be, owing to many causes, principal of which is the lack of proper inducements to immigrants, and the old, non-progressive style of our farmers. This is being changed, however, and many of them are diversifying their crops, using labor-saving implements, and growing more vegetables and fruits. The northern element among us has done much to bring about these changes.

VALUATIONS AND ACREAGE.

Dis't.	No. Acres.	Values.	No. Town Lots.	Value.	Value of all other Prop'y.	Total Valuations.
1	30,875	\$127,372			4,501	131,873 00
2	25,079 $\frac{1}{2}$	139,230			8,474	147,704 00
3	19,309 $\frac{2}{3}$	175,019			16,837	191,850 00
4	18,196	84,017			157,850	241,817 00
5	19,196	428,127			274,640	702,767 00
7	5,430	96,550			3,820	100,390 00
11	112,348	133,985			4,504	138,488 00
12	2,541 $\frac{1}{2}$	89,870			8,400	98,290 00
14	4,686 $\frac{2}{3}$	76,336	401	466,975	43,425	586,565 00
	186 2-5	45,956	244	509,300	341,520	896,600 00
	103 5-6	372,920	824	808,075	221,499	1,413,434 86
	230 $\frac{1}{2}$	176,450	422	479,665	126,959	803,074 00
	652 $\frac{2}{3}$	216,100	611	221,459	78,200	514,759 00
15	19,579 $\frac{3}{4}$	167,985	52	7,265	173,289	348,539 00
16	19,845	24,913			1,000	25,913 00
17	7,804 $\frac{1}{2}$	200,735	14	2,555	44,790	248,080 00
	308,743	2,555,569	2,568	2,526,064	1,508,489 36	\$ 6,590,110 86

The above is a statement of values, &c., for taxable property of the whole county, including the city—Fourteenth District—for 1875. Since that period the building of manufactories in the city, and investments by parties in real estate in the County, has no doubt increased the valuations considerably. It must be remembered in this connection that taxable property is not assessed for its full value, and that in the city of Chattanooga, the machinery of manufactories was exempt in 1875 from taxation, so that this would increase valuations considerably. These facts are favorable to those seeking investments in this County.

WAGES OF LABORERS.

Wages of farm hands are \$8 to \$18 per month, and of gar-

deners \$15 to \$25 per month. House servants are paid from \$4 to \$8 per month. This applies mostly to town and city.

Rivers, Creeks and Water Powers.

The Tennessee river flows through the county a distance of fifty miles, watering in its course thousands of acres of rich, highly productive land. Various creeks are tributary to the river, flowing through the county from every direction, which afford ample power for any number of manufactories, mills, etc. The products of the soil find a ready means of transportation on the Tennessee to Chattanooga, there to be reshipped for points south. In various portions of the county are grist mills, but no manufactories on an extensive scale. Here and there may be found on some creek, or other stream, a small manufactory, where water power can be utilized. The most important streams, besides the Tennessee river, are Sale, Soddy, Chickamauga, Chattanooga and Lookout creeks. The two latter empty into the Tennessee just below the city. The others, above. These several creeks, by proper daming, would afford sites for extensive manufactories. Some of them, in localities, would need but little, if any, daming, nature having assisted very materially in this respect.—[Resources of Tennessee.]

Geology of the County.

The geological formations of this county are exceedingly varied, commencing with the Knox dolomite, and ending with the Coal-measures. They embrace ten distinct groups or divisions, viz: Beginning with the Knox dolomite, the lowest, which we find in the valley lands, we next come to the Trenton and Nashville limestones, in the valleys and Missionary Ridge; then the dyestone or red iron ore group, mainly in small ridges, followed immediately by the Niagara limestone, black shale, and the siliceous or St. Louis limestone, mountain limestone, which forms the base of the mountain, and lastly, the Coal-measures, which cap Lookout and Raccoon mountains and Walden's Ridge. It may be noted here, that Lookout Mountain rests in a synclinal trough, or one in which the strata dip from both sides to the center, forming a trough. It may be further remarked, that on each side of this mountain, is a skirting ridge, rough and sharp, formed by the tilting outcrops of the siliceous group, the dyestone or red iron ore and the black shale, just as if the weight of the superincumbent mountain had bent this flexible mass in the center, and caused the edges to turn up. Missionary Ridge is formed by the outcroppings of the Knox limestone and dolomites, its eastern slope and contiguous knobby belt of country to the east of the ridge being covered with the flinty masses and gravel of this formation. Between Missionary Ridge and Chattanooga the rocks are Knox dolomite, Trenton and Nashville limestone, forming a wide rolling valley. This valley belt further north is covered with rounded flinty hills, making it a knobby region. Will's Valley, on the western side of Lookout, shows mainly outcrops of Trenton and Nashville blue limestone rocks. On the west side of this valley, at the foot of the Table Land, and forming a skirting ridge, the dyestone group again appears. Perhaps more than one-fourth of the county belongs to the Coal-measures, which furnish a large amount of good coal.—[Resources of Tennessee.]

Reminiscences of the Early Days of Hamilton County.

The territory south of the Tennessee river, and north of and adjoining the Chattahoochee river, in Georgia, was still in possession of the aborigines of this country up to 1836, when the Senate of the United States ratified the treaty made with them, to adjust the difficulties about to spring up between the Government, the State of Georgia and the Indians. This encouraged the whites, who began taking possession of this territory—the lands being subject to the school fund of Tennessee, after the extinguishment of the Indian title. Those who were settled on the lands had right of pre-emption, while any one might enter any lands not so pre-empted, at \$7 per acre. This was in accordance with act of Legislature, 1837. In this year, accordingly, a great deal was taken up. The year following, this territory of Hamilton county south of Tennessee river, called Ross' Landing, became the town of Chattanooga. In the several years following, up to 1844, Hamilton county increased but slowly in population or internal improvements. Accordingly, the citizens of the county held a "Third Meeting of the Friends of Domestic Manufactures"—we copy from the Chattanooga Gazette, Sept. 4, 1844:

"At a third meeting of the friends of Domestic Manufactures, in Hamilton county, at the Court House in Harrison, on Monday, the 2d inst., Lewis Patterson was called to the Chair, and F. A. Parham appointed Secretary.

"After the organization of the meeting, on motion, Col. Wm. Clift arose and delivered an argumentative address on the propriety of immediately entering into manufacturing in this county. The sentiments he advanced, were sustained by satisfactory references, and his address was listened to with profound attention.

"Richard Henderson, Esq., being called for, arose and urged the expediency of the steps which his fellow-citizens were then taking to increase the wealth of Hamilton county, and enhance the interests of those who engaged in the business. When he concluded, F. A. Parham having made a few prefatory remarks, offered the following resolutions, the adoption of which was ably advocated by John R. Williamson, Esq., and unanimously adopted:

"Resolved, That Dr. Troost, State Geologist, be invited to visit our county at his earliest convenience, and make a survey, so as to develop our natural resources, and that Wm. I. Standefer, Esq., Dr. Wm. I. I. Morrow, and Col. R. B. Brabson be requested to correspond with him on the subject.

"Resolved, That J. R. Williamson, Esq., Dr. B. Frazier, Robert Jack and Col. Wm. Clift, be appointed a committee to draw up an appeal to the citizens of Hamilton county on the importance of establishing manufactories, and that they furnish a copy of the same to the Chattanooga Gazette for publication previously to the next meeting.

"Resolved, That B. B. Cannon, Esq., Major Robert C. McRae, Gen. Sam'l Igou and R. Henderson, Esq., be appointed a committee to designate the kind of manufacturing which would be most conducive to the welfare of the citizens of Hamilton county, and that they defend their opinions by argument, and make their report to the next meeting.

"Resolved, That the friends of home manufactures in Hamilton county be

requested to meet in this place on the first Monday in next month, preparatory to organizing a manufacturing company.

"Col. B. B. Cannon, whose official business prevented him from being present at the commencement of the meeting, accepted an invitation to present his views on the subject of manufactures. They were highly encouraging and to the point.

"A letter addressed to Gen. S. T. Igou from Capt. S. S. Thatcher was read by the Secretary. Capt. Thatcher is a citizen of this county—a mill-right by trade, and his communication, detailing the cost of erecting and putting in operation a cotton spinning and weaving manufactory, was quite useful and entertaining to the meeting.

"Dr. B. Frazier submitted the following resolution, which was adopted:

"Resolved, That 1,000 copies of the appeal to be prepared by the committee be printed for the use of the citizens of this county, and that a committee of twelve—one from each civil district—be appointed to distribute the appeal in their respective districts.

"The following gentlemen were named as the committee:

"1st District—Robert A. Hunter. 2d District—Preston Gunn. 3d District—Alfred M. Rogers. 4th District—J. C. Rowden, Esq. 5th District—F. A. Parham. 6th District—Samuel T. Igou, Esq. 7th District—H. J. Harris. 8th District—John J. Ramsay. 9th District—Henry B. Lusk. 10th District—James Roark. 11th District—James Gamble. 12th District—John Brown, Jr.

"On motion of Col. B. B. Cannon,

"Resolved, That the Secretary have the proceedings of the meeting published in the next number of the Chattanooga Gazette.

"LEWIS PATTERSON, Chairman.

"F. A. PARHAM, Secretary."

Thus was planted the germ of those manufacturing interests which thirty-two years later have opened out into extensive proportions, and are constantly growing, so that we shall ultimately become the great manufacturing center of the South. In another part of the same issue is a communication from Mr. Thomas White on the subject of silk culture, in which he urges the consideration of the enterprise upon the people of the county.

Free Schools of the County.

So recent has been the inauguration of these institutions of instruction, that the county is not sufficiently supplied with buildings, and the other necessities of a system of public instruction. But, a beginning has been made, and enough interest manifested in the work in hand by the Trustees and Commissioners to insure their ultimate success. As yet the people of the county have not shown a good appreciation of this great boon. They have not recovered from the innovation upon their old way of educating, and thus are not prepared to look upon the free school as the only true system of general public instruction that can and will succeed where private enterprises often fail. The following, from the report of Prof. Beene, Commissioner of Hamilton county, will give some idea of the condition of the public schools:

The Public School law of 1873 has operated very beneficially in this county. Under this law schools have been established in every civil district. The number of persons enrolled, between the ages of six and eighteen, was, in Chattanooga, 2,387; outside the city, 2,146; total in county, 4,633. The attendance outside of the city is about fifty per cent., in the city more favorable, as will be seen by reference to our article on Public Schools of Chattanooga.

The schools of the county are established upon a firm basis. Public feeling is more favorable to them now than when first inaugurated. The facilities offered thereby are constantly increasing, and will be equal to all demands for fundamental education. In Chattanooga the principals of public schools are paid \$80 to \$90, assistant teachers \$40 to \$50 per month. Outside of the city teachers are paid \$30 to \$40 per month. There are three academic institutions in the county, the North Creek Academy, in the northwest portion of the county; the academy at Tyner Station, and the Chattanooga Female Institute.

Since the above report was made, the Public Schools have progressed in a gradual manner, not so much in numbers, as in every other way. The proper management of these Schools has brought them up to a high standard. Their success is no longer a question.

The Political History of Hamilton County.

The information at the writer's hand on this subject, is very limited. But enough is known to warrant the assertion that Hamilton county has furnished to the legislative halls of the nation two of her most gifted sons. In the Fifth Congress, Hon. Joseph Anderson was Senator with Gen. Andrew Jackson from Tennessee. In the Sixth Congress the former also served, with Hon. Wm. Cocke.

STATE SENATORS.

A. M. Cate, (2 terms), A. A. Pearson, E. A. James, L. S. Marye.

UNITED STATES CONGRESS, FROM THIS COUNTY.

R. B. Brabson, Wm. Crutchfield.

UNITED STATES SENATE.

D. M. Key.

STATE REPRESENTATIVES.

Dr. Wm. I. I. Morrow, Wm. I. Standifer, James A. Whiteside, John Cowart, J. W. White, John C. Burch, D. C. Trewhitt, J. R. Hood, George D. Foster, John Anderson, E. A. James, Isaac G. Thomas, H. N. Snyder, J. R. James.

From the above it will be seen that Hamilton county has furnished the Council Halls of the Nation with several of her sons. Did space permit we might turn the eyes of the reader toward the wars of 1812, and later of 1847-8, and still more recently, of 1860-5, where, on many a bloody field, Hamilton County's sons poured forth their life-blood for their country, and their homes and firesides—this task, however, remains for the historian. To these heroes, in peace or war, all honor!—will find a responsive chord in every patriotic bosom.

Grapes and Wines.

This is one of the industries that can be brought to perfection in this county. The cultivation of this delicious fruit has been carried on in this section with much success; it finding a ready sale south, packed in boxes; it also finds a ready market here for purposes of wine making. Mr. C. E. Stanley, one of our most successful grape-growers, is having great success in this line, on Missionary Ridge, four miles from this city. In this connection we take a few extracts from an article for the Resources of Tennessee on this subject.

The cultivation of grapes, and the production of wine, are destined to become very important and extensive occupations in this locality. Fully one-half of the lands of this county are peculiarly adapted to the cultivation of the grape. On the light sandy soil of Lookout Mountain and Walden's ridge, on the rich red soil of Missionary and other ridges, and on the white and rocky soil of lower hills, grapes are grown superior to any in the northern states. The soil and climate combine to produce grapes in greater abundance, contain more saccharine matter, yielding more wine, and with a richer "bouquet" than is produced in the celebrated vineyards of Ohio and Missouri. So far as investigation has gone, the Hartford Prolific, Concord, Ives' and Delaware do the best, although other varieties do well.

THE CATAWBA,

which is regarded as making the best wine, is liable to the oidium or wine mildew, which has proved so troublesome elsewhere. This difficulty, in regard to the Catawba, can be overcome, to some extent, by frequent renewals, as young vineyards are less affected. Seven hundred and fifty gallons of pure juice to the acre have been obtained from the Catawba in this county. Thirteen pounds of grapes make a gallon of wine. With respect to grapes generally, each kind of soil and each elevation has its advantages. On the tops of the highest ridges, and on the sides of the mountains, at an elevation of three to five hundred feet, immunity from early frost is secured, and early grapes can be obtained for shipment to northern markets. The Hartford Prolific matures by the 15th of July on the eastern slopes. For the southern markets the Concord can be grown on the elevated table-lands, and kept on the vines until the middle of October.

THE CONCORD

is regarded as the most healthy and productive of all varieties. With good care and cultivation, 10,000 pounds to the acre can be produced. Its quality is very much improved in this climate.

Grape-vines should be set further apart here than is usual in the north, and trained on wires, on account of their rank growth.

TURNPIKES, ROADS AND BRIDGES

The County is not so well supplied with Turnpikes and good roads as it should be. The old-fashion dirt road has seemed to meet all the requirements of the farming community—their ideas being rather narrow in this respect. But the times are changing. One of the results of the late war has been, in this matter, beneficial. It has changed the labor system, and thus put the agriculturalist on his own right arm for help. Finding that it is not so easy to work hard as to compel others, this thing of wagoning over miserable roads to market has struck home to them, as it were. As a consequence, something had to be done to bring about a change. Accordingly a few men interested in good roads have undertaken to build a Turnpike in the direction of Ross-ville, Ga., a distance of four or five miles from Chattanooga, south, one of the principal thoroughfares connecting the city with the farming district around her.

A CHARTER WAS SOMETIME SINCE

granted Richard Henderson, Esq., and others, of this city, for a Turnpike extending from a given point south of the city limits to Ross-ville, and work was begun on it to make a Macadamised road of $3\frac{3}{4}$ miles in length—two miles of which is practically completed. The Legislature having passed an act giving each County in the State jurisdiction over her own convicts sentenced for a period not exceeding one year, the Commissioners on County Workhouse for Hamilton County entered into a contract with the Turnpike Company to finish it, for the purpose of making a good disposition of the convicts, as well as to improve our public roads. The County Commissioners have the right when it is completed, of declaring it a free road, or establishing toll gates for raising revenues to pay for its construction. In either event, this much will be accomplished toward increasing the facilities for reaching Chattanooga from the rural districts in a southerly direction.

The Lookout Mountain Turnpike Company.

In the year 1847 a Charter was granted James A. Whiteside Esq., and others, of the county, to make a Turnpike on Lookout Mountain, a distance of $2\frac{1}{2}$ miles from bottom to summit, with toll-gate privileges. A good road was cut out on the mountain side, in many places of easy grade, and kept up for many years in splendid condition. So good was the road at that time that a

fast gentleman of this town—John G. Bynum—drove a horse up the mountain to the hotel, a distance of a little over two-and-a-half miles, in about five minutes! It didn't hurt Mr. B. Everybody agreed it was the fastest time on record. But it killed the horse.

DURING THE LATE WAR

the road was so much used by the armies, that it has scarcely recuperated from the effects of it. Still, it is in a very fair condition; indeed, better than the average road. The present management are endeavoring to keep it up until old Lookout shall become a place of general resort as in days of yore!

PRINCIPAL OFFICERS OF COUNTY--1820-76.

County Court Clerks.—Asabel Rogers, Wm. Rogers, James Clift, George Arnett, Wm. L. Rogers, Chas. W. Vinson, R. H. Guthrie, J. H. Hardie, L. M. Clark, present incumbent.

Sheriffs.—Chas. Gamble, Terrill Riddle, A. M. Rogers, Mat. Anderson (two terms), John Johnson, J. C. Francis, James Roddy, James C. Connor, Wm. Snow, Milo Coulter, G. W. Rider, A. B. Connor, Robert B. Campbell, A. B. Connor, Wm. H. Bean, J. C. Connor, Charles B. Champion, present incumbent.

Tax Collectors—(Up to 1840 Sheriffs collected taxes.)—James Rogers, Newton McGill, Ab. Selcer, Joseph Yarnell, W. H. Bean, Mel. Adams, D. B. Ragsdale.

Trustees.—Thos. Stiff, Wm. Rogers (several terms), Alfred King, A. P. Hunter, Geo. W. Julian, Jesse Locke, W. H. Crowder, George Curry, W. H. Crowder, up to July, 1875, F. Vaughn appointed, and present incumbent.

Registers.—J. H. Jones, (two terms), Jerry Jones, (two terms), James S. Yarnell, A. G. W. Puckett, R. M. Rawlings, A. A. Vinson, John H. Torbett J. B. Peters, (book I covering record between 1844-61 lost during war, 1861-5) A. W. Moore, John F. Hamill, H. C. Beck, present incumbent.

Circuit Court Judges.—Thos. Keith, Geo. W. Rowles, John C. Gaut, Geo. W. Bridges, W. L. Adams, John W. Hoyle, John O. Cannon.

Circuit Court Clerks.—Daniel Henderson, Dr. P. H. Butler, Benjamin C. Conner, B. B. Cannon, (two terms) A. G. W. Puckett (part of one and two), E. A. Glass, Wm. Rogers, C. W. Vinson (three terms), present incumbent.

Chancellors.—Thomas L. Williams, T. Nixon Van Dyke, A. G. Welcker, Daniel Trewhitt, D. M. Key, Wm. M. Bradford, present incumbent.

ADDENDA, CORRECTIONS, ETC.

On Page 86 read Mills, corn,—No. hands employed, 12.

On Page 11, bottom line, read 30,000 bu. capacity of Wharf-boat.

On Page 71, 18th line read 60 bbls. instead of "ten."

On Page 90, 4th line read 85° 30' west instead of 85° 30' "east," and on 5th line read 415 square miles instead of "645."

CHATTANOOGA SOUR-MASH DISTILLERY.

Messrs. Kaylor & Loring have just completed a sour-mash distillery, of five barrels capacity per day. It is proposed to make highwines, also, in addition to rect'fying, and the abundance of grain and the cheapness of it, would warrant the conclusion that this enterprise can be made a success. The proprietors are well known here, and will make this a paying business.

FEDERAL, STATE AND COUNTY DIRECTORY.

UNITED STATES INTERNAL REVENUE.

D. D. PRATT, Commissioner, Washington, D. C. For the Third Collection District of Tennessee:

A. G. SHARPE, Collector; F. M. CUSHMAN, Dep'ty Coll. for Hamilton & James Counties; LUD. L. SAMPLE, Dep'ty Coll. for Marion, Sequachie, Bledsoe, Rhea & Meigs Counties—Offices at Chattanooga, Tenn.;

JOHN L. ELDER, Dep'ty Coll. for Warren, VanBuren, Grundy, White, Putnam, Smith and DeKalb. Postoffice address, McMinnville, Tenn.

ELISHA CHASTAIN, Dept'y Coll. for Overton, Jackson, Cumberland, Fentress, Clay and Macon. Postoffice address, Livingston, Tenn.

UNITED STATES COMMISSIONERS:

D. J. DUFFY, ANDREW TREWHITT.

(Chattanooga.)

STATE DIRECTORY.

JAMES D. PORTER, Governor; C. N. GIBBS, Sec'y of State; JOHN C. BURCH; Comptroller; WM. MORROW, Treasurer; LEON TROUSDALE, Sup't. of Instruction. Offices: At the Capital, Nashville, Tenn.

COUNTY COURTS.

CIRCUIT—Hon. Wm. M. Bradford, Judge; C. W. Vinson, Clerk. Terms—1st Monday in Jan. May, Sept.

CHANCERY—Hon. Wm. M. Bradford, Chancellor; J. A. Caldwell, C. & M.; J. T. Hill, Dept'y C. & M. Terms—Second Monday in April and October.

COUNTY—Hon. A. G. W. Puckett, Judge; L. M. Clark, Clerk; J. S. Bell, Deputy Clerk.

PART THIRD.

LOOKOUT MOUNTAIN,
CHICKAMAUGA,
MISSIONARY RIDGE.

A Few Preliminary Remarks.

High up above every prominence which surrounds it, standing like some stupendous figure amidst a race of pygmies, is grand old Lookout, full of memories, which its sight recalls, historic and full of interest, a very monument of the upheavals and volcanic eruptions in ages past, "whereat the memory of man," etc., and in later days of the struggles of contending armies above the misty clouds, at foot and on summit, where erst was "smiling peace and gracious plenty." Here, then, on this huge pile of sand and stone may be seen the fast decaying vestiges of

"War's grim, wrinkled front,"

which, thank Heaven, is being smoothed o'er by the hand of Peace!

"LOOKOUT."

This term applied to this beautiful Mountain, is accounted for in the following manner: Some twenty miles below Chattanooga, in Wills' Valley, may be seen two peaks, or spurs, of the mountain, which rise up above the summit, and so placed opposite each other, as to resemble two huge figures hewn out of stone, staring in defiance each at the other—hence the appellation, "*Look-at*," and the corruption into Lookout.

"CHAT-A-NU-GA."

This term was sometimes applied to Lookout Mountain, and is explained as follows: Cumberland Mountain, and its outliers, Lookout Mountain, Walden's Ridge and Raccoon Mountain, with

various other hills and ridges in and around Chattanooga, present a broken and wild view, and, continues the Historical Record of Hamilton County: "To these broken and converging mountains, the word *Chat a-nu-ga* owes its origin—hence the name "Chattanooga Mountains"—being the most appropriate term to apply to them in the aggregate, without reference to their distinct and separate names, the same having been referred to at intervals in traditional history."

And so, the Indian describing this country to his neighbor and his children, himself having seen it, would trace in sand, a rough but suggestive topographical situation of "Chat-a-nu-ga," which, on being approached by visiting Indians, was easily discovered and designated "Chat-a-nu-ga," or broken, towns. Hence the corruption into CHATTANOOGA.

Places of Interest in and Around Chattanooga and Table of Distances.

To Lulah Lake.....	9	miles
Rock City.....	6	"
Lookout Mountain House, and Cottage Home,.....	5	"
Point Lookout.....	5½	"
Blowing Spring, base of Lookout Mt.	4	"
Chicamauga Battlefield.....	8	"
Missionary Ridge.....	3	"
National Cemetery.....	1½	"

Off for the Mountain.

In getting ready for a trip to Lookout, engage, the day before, if convenient to do so, a vehicle suitable for the size of your party. As to time occupied in going, one can visit several places of interest, including "The Point," in half a day; but it is better to spend all day, so that you may have time enough to make the rounds of all the spots of interest near Summertown. Do not prepare anything to eat, as any of our friends—Arnold, at the "Lookout Mountain House," or Mrs. Ruble's "Cottage Home," a hundred yards west of the former place, can furnish you with the best the Chattanooga market affords, together with what they have of their own raising.

The Lake, Rock City, Etc.

If one wishes to see these marvels of nature's handiwork, it will require a couple of days on the Mountain to do justice to the subject; but the trip from Chattanooga (nine miles,) can be made in one day.

Rock City is six miles from Chattanooga, and is worth seeing, because of its wonderful formations. In another chapter we give

full description of this real city of rocks.

The Lake, Falls, etc., are four miles further, in a southerly direction.

There are many points of interest on the road to those places, which will be spoken of in their regular connection.

Lake Seclusion.

This beautiful body of water is distant from the summit five miles, in a southerly direction, over a good road for carriages and other vehicles. Here is some very fine scenery, the Lake, in itself, worth the time and trouble of visiting. It is very deep, varying from 50 to 150 feet wide, rippling along over pebbly bottomis, anon dashing over little precipices, or narrowing between high walls of rock, on either side, rushing impetuously, until relieved by a wide surface again.

The scenery around is wild and beautiful. Flowers of every hue fringe the banks; evergreens on all sides—rocks, falls, all together making the place a picturesque and romantic spot.

About one mile below the main body of the water, is

Lulah Falls,

where the Lake precipitates itself over a precipice 125 feet high. Here may be seen one of the grandest sights on Lookout. The water falling such a height makes a beautiful spray, through which the sun-rays display to the eye all the hues of the rainbow. A path, somewhat rugged and precipitous, leads down beneath the falls, where a cave gives ample protection from the falling water, and affords a better view of the falls. It is not exactly

“Facile descensus est Averni—”

but it forcibly reminds one of the aphorism. Still, reader, do not fail to make this trip if you have gone thus far in your tour of observation and pleasure.

On leaving this spot, you have a ride of about half an hour, a distance of 2 miles to the wonder of Nature's wondrous works,

Rock City.

Here is a very city of rocks. Nature has displayed with a lavish hand her wonderful formations. The first view on approaching is

“THE SENTINEL'S ENTRANCE TO ROCK CITY;”

In this connection, the reader will pardon a little digression from the subject that we may give a beautiful Indian tradition appropriate to the subject under consideration, one that will

awaken a feeling of interest in every breast; for tales of love and devotion, such as this, will find a responsive chord in every heart:

The Legend.

The tradition runs that Sautee was a brave of a tribe between which and the Cherokees a deadly feud existed. Upon some occasion he saw the beautiful daughter of the Chief of the Cherokees, Nacoochee, the Evening Star. With the ardent Sautee, to see her was to love her. Of an impetuous and daring temper he determined to win her against all opposing obstacles—the very obstacles, no doubt, giving fuel to the flame. How and where they met, how he found opportunity to breathe his passion in her ears and win her maiden heart tradition speaks not; but the result was a repetition of the "old, old story."

"She loved me for the dangers I had passed;
And I loved her that she did pity them."

As no concession on the part of her father could be expected, she eloped with her lover. The strength of her love must have been great, for no woman ever sacrificed more. She not only sacrificed all the sweet charities of home and kindred, friends and country, but the opposition to the match being as great in Sautee's tribe as her own, she could find no shelter with her husband's people.

In the extremity they took shelter in a cave in the rock-ribbed sides of Lookout. The deep verdure of the forest concealed the entrance. Fragrant grasses made their nuptial conch. Game was abundant, and under the shelter of the night many a fat duck, turkey and partridge fell under the unerring arrow. A neighboring spring furnished water for their simple but abundant meal, prepared by the deft and loving hand of Nacoochee. The angry father of the "Evening Star" had vowed vengeance against Sautee, and he found many anxious and disappointed young braves to aid his search.

At length Sautee was found, attacked and overpowered by numbers, and taken prisoner. Short shift was given to the victim of Indian vengeance. He was condemned to death by being thrown from the precipice of Lookout, and all the tribe was gathered on top of the mountain to witness the sacrifice. Nacoochee was forced to be present to witness the death of him she loved better than life. With heaving breast and tear-dimmed eye she watched the dread preparations for his death; and yet with a woman's pride she rejoiced in the heroic bearing of her lover. Resolute and stern he looked upon his foes with bearing as proud and high as when he met them free and unmanacled, foot to foot, in battle. With a voice loud and clear as a battle cry, he sang his death song. The rocks still gave back the echo of the mournful cadence, when two strong braves seized him in their arms, raised him high in the air and flung him far over the precipice. While the attention of the tribe was absorbed in this tragedy Nacoochee seized the opportunity of their negligence, and sprang over the precipice. The last cry upon her lips was "Sautee!" "Santee!" Side by side, one hundred feet below, amidst the rugged rock, all that remained of the devoted lovers was found stilled in death. With a heart

filled with grief and remorse, the stricken father buried them side by side in the lovely valley.

The memory of their love and tragic death will be ever preserved in the beautiful traditions which have come down to us from the days of the long ago. Shrined in the wondrous trees, the waving grass, the tasseled corn, the flowing waters, the rocky springs, the enveloping hills and mountains, their bodies only are buried. Their memory lives and consecrates the haunts of nature with the mystery and passion of love.

There is another version as to the manner of the death of the lovers: That Sautee was condemned to be shot, and the devoted received the arrow in her own bosom. A common flower in the hills and valleys bears what looks like a scarlet drop in the bosom of its petals. The beautiful tradition of the Indian was, that the flower sprang from the blood of Nacoochee to perpetuate the memory of her passion.

The following views at Rock City, where we left off, and at Cascade Glen, two miles north near the old Lookout Mt. Educational Institutions, and at other places, will prove intensely interesting. These views are easily distinguished—especially at Rock City. Photographic views of these wonderful formations are on sale at the gallery at the Point, or can be procured at the bookstore of Patten & Payne, in the city.

PRINCIPAL VIEWS IN ROCK CITY.

1. Fat Man's Misery.
2. Pedestal Rock.
3. Twin Sisters.
4. Elephant Rock.
5. Street View.

VIEW AT CASCADE GLEN.

1. Grand Falls, Cascade Glen.
2. Bridal Veil and Robe, Cascade Glen.
3. The Rapids, " "
4. Large Falls, " "
5. Crystal Cascade, " "

VIEW AT VARIOUS POINTS.

1. Chattanooga, from Point Lookout.
2. Umbrella Rock, on Point Lookout.
3. Roper's Rock, where troops scaled the cliffs.
4. Battle Ground, Hooker's fight above the clouds.
5. Mountain Road, east side of the Mountain.
6. Chickamauga Cliffs, opposite battle field.
7. Sunset Rock on western brow.
8. Cliff over Alum Spring at top of Mountain.
9. Saddle Rock, near Hotel.
10. Nashville and Chattanooga Railroad, running under the cliffs.
11. Lake Seclusion, from above.
12. Same, from below.
13. Lulah Falls, 115 feet high.

Point Lookout.

This attractive place is distant from the summit, or Summer-town, about half a mile, in a direct northerly direction. At the latter place, on the eastern brow of the mountain, and about fifty yards from the Lookout Mountain House, is a huge boulder, with a large, comparatively smooth surface, commanding a fine view of the country below, with its numerous streams, hills and dales, ridges and mountains. This is designated as

"Bragg's Rock."

Here on this commanding eminence, thirty-eight years ago, stood a young officer of the United States Army, gazing upon a mighty forest below him, with here and there a rude hut or unpretentious cot—the first of the habitations of the white man in the Cherokee country, known as "Ross' Landing." Lt. Braxton Bragg was among the troop sent to this country by Government, after the conclusion of the treaty with them, in 1837, to remove the Indians to their reservations in the West. His eye then rested upon a peaceful, quiet scene, disturbed only by the bustle and confusion incident to the commencement of a removal of a few hundred aborigines from before the advance of the aggressive white man. A few years later, the hero of Mexican battle-fields, in the service still of his Government, quits that service to join that of a Government set up by those who claimed the right to form a new confederation for themselves.

STANDING UPON THIS ROCK,

in 1863, Major-General Braxton Bragg, of the Confederate forces of the Army of Tennessee, with field-glass in hand anxiously watched the movement of the Federal army as it closed in upon him from Middle Tennessee. Forced to retire into the Chickamauga Valley, in Georgia, Gen. Bragg reluctantly quitted Lookout Mountain, with his forces, leaving but a remnant to keep up a show of resistance on the Mountain.

In the meantime, Rosencrantz took up his position on the left bank of the Tennessee River, and in Chattanooga. During this time, Bragg was reinforced by Gen. Johnson, from Mississippi,

THE BATTLE OF CHICKAMAUGA.

On the 19th Sept. Gen. Bragg opened the fight by an attack on the Federal army, which lasted till night, and left the victory undecided. The morrow's sun rose on thousands whose faces would ne'er feel its warm rays again. The battle lasted till night-fall of this day, resulting in a victory for the Confederate forces. Under cover of darkness the Federal army began a retreat into

Chattanooga, which was effected that night and the day following.

Leaving the discussion of these sanguinary struggles, called up at the mention of "Bragg's Rock," and as only incidental to the subject in hand, we proceed a hundred and fifty yards further on the road to the Point, and here is the remnants of the once lively and interesting hotel, now awaiting the touch of energetic carpenters, painters, and masons to bring it out of its rather rough appearance. Here on this spot, before the war, were gathered as many as five hundred, at times, of the southern beauty and chivalry, and the northern stateliness, pride and honor—all mingling in unreserved social restraint, little dreaming of the shock of arms soon to resound where they nightly chased the fleeting hours away in the brilliant ball room.

LEONORA SPRING.

Just opposite the hotel at the cliff is several old flights of rickety steps, leading down beneath the perpendicular rocky ledge, at the foot of which is a fine spring. It is back under the cliff a few feet, in a sort of basin which nature had formed for its reception from the source. This beautiful spring was discovered by the wife of Col. James A. Whiteside, the proprietor of the hotel, while that lady was taking a walk around the base of the cliff. It was immediately fixed up for use at the hotel—a pump being put in and reservoir built on top for receiving the water. The spring received its name "Leonora," in honor of the lady who discovered it.

A RIDE OF TEN MINUTES

brings us to the famous "Point"—the culmination of Nature's grand achievement. Here, spread out as a panorama before the eye is a sight which invariably calls forth the most reverential feelings of him who gazes upon the beautiful scene! Mountains, hills, and dales on every hand. As far as the eye can reach, in a northeasterly direction, seemingly like a mere silver line nestled among the mountains, is the Tennessee River, winding its way down toward the sea, washing the shores of thousands of acres, until widening out opposite the Point, it rolls around what is called the

"MOCCASIN POINT."

The Indians so called it, because of its great resemblance to a moccasin. The city of Chattanooga in the valley below, looking like a good sized camp; the Nashville & Chattanooga R. R. running around the base of the Mountain; the hills and valleys, and streams coursing through them, stretching far away into the hazy

distance, enabling the eye to rest upon parts of the states of Tennessee, Virginia, North and South Carolina, Georgia, Alabama and Kentucky—all combine to make this one of the grandest views on the American Continent.

ROPER'S ROCK.

Just at the Point may be seen this famous rock, made so by the fact of its having been scaled by Hooker's men, on that memorable occasion, of which we speak hereafter.

UMBRELLA ROCK

is situated just opposite, and within a few steps of the gallery, on the Point. This is a wonderful formation, and is remarkable for its resemblance to its namesake.

THERE ARE MANY OTHER

places of interest near the Point, which are readily pointed out by the residents of the mountain; and which to see requires a little longer time than is consumed in visiting the Point.

IN CONCLUSION.

Lookout Mountain has become familiar all over the land to everyone. During the war it was the theatre of several contests between the contending armies, and more particularly of the charge of Hooker's men up the Point. The Mountain begins at Gadsden, Ala., and terminates abruptly within $2\frac{1}{2}$ miles of Chattanooga, on the south bank of the Tennessee River. The soil is of a sandy, loamy nature, quite productive, especially of fruits and esculents. The climate is moderate—neither extremely cold nor uncomfortably warm. The natives are a ruddy, vigorous people, plain living and comfortably situated.

INDIAN NAMES OF MOUNTAINS AND STREAMS.

The Indians designated the mountains and streams of their country by names remarkable for their euphony and beauty. Many of these have been lost, or are now seldom heard. The loss is, we fear, irreparable. Bay's, Stone, Iron, Yellow, Smoky, Black, Grand-father Mountains, were once doubtless known by names as smooth and musical as Alleghanee, Unaca, Chilhowee and Chattanooga. Dumplin, Sandy Mush, Little Dismal, Bull Run, Calf Killer, Sweet Water, and High Tower, though sufficiently significant, would grate harshly upon the ears of a Cherokee, who had bathed in the waters, luxuriated in the shades, formed his ambuscade and sung his war-song upon the banks of the Allejay, the Oustinalla and the Etowah.

THE "BATTLE ABOVE THE CLOUDS."

On the 24th November, Gen. Hooker began an assault on the Confederates forces stationed on the side of the mountain, just below the Point. At about eight o'clock of the morning, the movement of the troops began. A cloud hung like a pall over the mountain, thus enabling Hooker's men to come upon the adversary unaware. Suddenly attacked, a complete rout of the Confederates seemed inevitable; but they fought with desperation until nightfall before being repulsed. Those who were in Chattanooga described it as one of the most magnificent views of the grand panorama of war. It was just dark enough to see the flash of the muskets, and yet light enough to see the columns of the contending armies. The Confederates retired up the Point; and such was the enthusiasm of the Federal troops that they pursued the enemy up on the very summit, compelling them to fall back to Summertown, about half a mile. The next morning the Stars and Stripes could be seen by the surrounding country floating from the flagstaff on Point Lookout, telling the story of Hooker's conquest. The following dispatches passed between the contending generals and their respective headquarters:

CHATTANOOGA, Nov. 25, '63—7:15 p. m.

MAJ. GEN. HALLECK, General in Chief—Although the battle lasted from early dawn till dark this evening, I believe I am not premature in announcing a complete victory over Bragg. Lookout Mt. top, all the rifle pits in Chattanooga Valley, and Missionary Ridge entire have been carried, and are now held by us.

U. S. GRANT Maj. Gen'l.

CHICKAMAUGA, Nov. 25, 1863.

GEN. S. COOPER, Adj't. and Insp. Gen'l.—After several unsuccessful assaults on our line to-day, the enemy carried the left center about 4 o'clock. The whole left soon gave way in considerable disorder. The right maintained its ground and repelled every attack. I am withdrawing all to this point.

BRAXTON BRAGG.

Bragg's right rested on Mission Ridge, and his left on Lookout Mt. a distance of nearly seven miles of line to protect.

A few days before the abandonment of the Mountain, President Davis reviewed the situation of affairs in the valley below, and concluded he had the Federals "in a trap," but subsequent events proved the fallacy of his expectations.

[The following Essay on the Cumberland Table' Lands was delivered before the "Medical Society of the State of Tennessee," at its regular stated meeting in Nashville, in 1875, and it is so *apropos* that we publish it in full.]

A PEOPLE WITHOUT CONSUMPTION,

And some Account of their Country—The Cumberland Table-Land.

By E. M. WIGHT, M. D., CHATTANOOGA, TENN.

During the ten years that I have practiced medicine in the neighborhood of the Cumberland Table-lands, I have often heard it said that the people on the mountains never had consumption. Occasionally a traveling newspaper correspondent from the North found his way down through the Cumberlands, and wrote back filled with admiration for their grandeur, their climate, their healthfulness, and almost invariably stated that consumption was never known upon these mountains, excepting brought there by some person foreign to the soil, who, if he came soon enough, usually recovered. Similar information came to me in such a variety of ways and number of instances, that I determined some four years ago, when the attempt to get a State Board of Health organized was first discussed by a few medical men of our State, that I would make an investigation of this matter. These observations have extended over that whole time, and have been made with great care and as much accuracy as possible; and to my own astonishment and delight, I have become convinced that pulmonary consumption does not exist among the people native and resident to the Table-lands of the Cumberland mountains.

In the performance of the work which has enabled me to arrive at this conclusion, I have had the generous assistance of more than twenty physicians, who have been many years in practice in the vicinity of these mountains. Their knowledge of the diseases which had occurred there, extended over a period of more than forty years. Some of these physicians have reported the knowledge of the occurrence of deaths from consumption on the Table-lands, but when carefully inquired into, they have invariably found that the person dying was not a native of the mountains, but a sojourner in search of health. In answer to the question: "How many cases of pulmonary consumption have you known to occur on Walden's Ridge, among the people native to the mountains?" eleven physicians say: "Not one." All of these have been engaged in practice there more than three years, four of them more than ten years, one of them more than twenty, and one of them more than forty years. All the physicians of whom inquiries have been made are now residents, or have been, of the valleys contiguous to Walden's Ridge, and know the moun-

tain people well. Four other physicians in answer to same question say, that they have known from one to four cases, numbering eleven in all, but had not ascertained whether five of them were born and raised on the mountains or not. The names and place of death of all these cases were given, and I have traced their history and found that but three of them were "natives," or had lived there more than five years, and that one of these was 57 years of age when she died, and had suffered from cancer for three years before her death. The two others both died within six months after returning home from long service in the army, where both contracted their disease.

All these investigations have been made with more particular reference to that part of the Cumberlands known as Walden's Ridge, than to the mountains as a whole. This ridge is of equal elevation and of very similar character as the main Cumberland range in the southern part of Tennessee, northwest Georgia and northeast Alabama, and what is true of this particular part of the great Cumberland table is, in the main, true of the remainder.

Sequatchee valley lies between Walden's Ridge, and what is commonly known in that neighborhood as the Cumberland mountains, and separates it from the main range for a distance of about one hundred miles, from the Tennessee river below Chatanooga to Grassy Cove, well up toward the center line of the State. Grassy Cove is a small basin valley, which was described to me there as a "sag in the mountains," just above the Sequatchee valley proper. It is here that the Sequatchee river rises and flowing under the belt of hills which unites the ridge and the main range, for two miles or more, rises again at the head of Sequatchee valley. Above Grassy Cove the mountains unite and hold their union firmly on their way north as far as our State reaches.

Topographically considered as a whole, the Cumberland range has its southern terminus in Alabama, and its northern in Pennsylvania. It is almost wholly composed of coal-bearing rocks, resting on Devonian strata, which are visible in many places in the valleys.

But a small portion of the Cumberlands lie above a plane of 2,000 feet. Walden's Ridge and Lookout Mountain vary in height from 2,000 to 2,500 feet.

North of Grassy Cove after the ridges are united, the variation from 2,000 feet is but little throughout the remainder of the State, and the general character of the table changes but little. The great and important difference is in the climate, the winters being much more severe in these mountains in the northern part of the State than in the southern, and the summers much more liable to sudden changes of weather. Scott, Fentress and Morgan counties comprise this portion of the table, and these have not been included in my examination, excepting as to general features.

In all our southern country, and I may say in our whole country, there is no other large extent of elevated territory, which offers mankind a pleasant living place: a comfortable climate—none too cool or hot—and productive lands. We have east of the upper waters of the great Tennessee river, in our State, and in North Carolina and Georgia, the great Blue Ridge range of mountains, known as the Unaka, or Smoky, Chilhowee, Great and Little Frog, Nantahala, etc., all belonging to the same family of hills. This chain has the same general course as the Cumberlands. It is a much bolder range of mountains, but it is vastly less inhabitable, productive or convenient of access. The winters there are severely cold, and the nights in summer are too cold and damp for health and comfort, as I know by a personal experience of two summers on the Nantahala river. But the trout fishing is beyond comparison, and that is one inducement of great value, for a stout consumptive who is a good fellow. These mountains are much more broken up into branches, peaks and spurs than the Cumberlands. They afford no table territory of any extent. There are some excellent places there for hot summer visits: Ashville, Warm Springs, Franklin, and others.

The Cumberland mountains as a whole are flat, in broad level spaces, broken only by the "divides" or "gulfs," as they are called by the inhabitants, where the streams flow out into the valleys.

Walden's Ridge, of which we come now to speak particularly, is the best located of any part of the Cumberlands as a place for living. From the separation of this ridge from the main range at Grassy Cove, to its southern terminus at the Tennessee river, it maintains a remarkably uniform character in every particular. From it, access to commerce is easy, having the Tennessee river and the new, (now building) Cincinnati Southern Railroad, skirting its entire length on the east. It rises very abruptly from both the Tennessee and Sequatchee valleys, being from 1,200 to 1,500 feet higher than the valleys on each side. Looking from below, on the Tennessee valley side, the whole extent of the ridge appears securely walled in at the top by a continuous perpendicular wall of sandstone, from one to two hundred feet high; and from the Sequatchee side, the appearance is very similar, excepting that the wall is not so continuous and of less height.

The top of the ridge is one level stretch of plain, broken only by the "gulfs" before mentioned, and an occasional prominent sandstone wall or boulder. The width on top is, I should judge, six or seven miles. The soil is of uniform character, light, sandy, and less productive for the ordinary crops of the Tennessee farmer, than the soil of the lowlands. The grape, apple and potato grow to perfection, better than in the valleys, and are all never-failing crops; so with rye and buckwheat. Corn grows well, very well in selected spots, and where the land is made rich by the cultivation. The grasses are rich, and luxuriant even in the wild forests, and when cultivated the appearance is that of the rich farms of the Ohio or Connecticut rivers, only here they are green and growing the greater part of the year; so much so that sheep, and in the mild winters the young cattle, live by the wild grasses of the forests the whole year. The great stock raisers of the Sequatchee and Tennessee valleys make this the summer pasture for their cattle, and drive them to their own farms and barns, or to market in winter. The whole Cumberland table, with the exception of that small part which is under cultivation, is one great free open pasture for all the cattle of the valleys. Thousands of cattle graze there whose owners never pay a dollar for pastureage, or own an acre of the range, though as a rule, most of the well-to-do stock farmers in the valleys own more or less mountain lands. These lands have until quite recently been beginning purchasers at from 12½ to 25 cents per acre in large tracts of 10,000 acres and upwards, and perhaps the same could be said of the present time, leaving out choice tracts and easily accessible places, which are held at from fifty cents to two dollars per acre, wooded virgin lands.

The forest growth of Walden's Ridge is almost entirely oak and chestnut. Hickory perhaps comes next in frequency, and pine after. There is but little undergrowth, and where the forests have never been molested, there are but few small trees. This is due to the annual fires which occur every autumn, or sometime in winter, almost without exception, and overrun the whole ridge. It does not rage like a prairie fire. Its progress is usually slow, the material consumed being only the dry forest leaves and grasses. The one thing essential to its progress is these dry leaves, hence, it cannot march into the clearings. Nearly all the small shrubs are killed by these fires, otherwise they are harmless, and are greatly valued by the stock men, for the help they render in the growth of the wild grasses. The free circulation of air through these great unbroken forests is certainly much facilitated by these fires, since they destroy every year what would soon become impediments. The destruction of this undergrowth leaves the woods so open, and the lands are mainly so level, that a carriage may be driven for miles regardless of roads, through the forests in every direction.

The shrubs seen about the fields, and places where the forests have been interrupted by civilization, and other causes, are blackberry, huckleberry,

raspberry, sumac, and their usual neighbors, with the azalia, laurel and rhododendron on the slopes in the shade of the cliffs.

The kinds of wild grasses, I regret to say, I have not noted, and the same of the rich and varied display of wild flowers.

The whole ridge is well supplied with clear, soft running water, even in the dryest of the season. There are no marshes, swamps, or bogs—no still water—not even a “puddle” for the soil is of such a character that surface water quickly filters away into the sands, and mingles with the streams in the gulfs. Springs of mineral water are abundant everywhere. Probably there is not a square mile of Walden's Ridge which does not furnish chalybeate water abundantly. Sulphur springs, with epsom salts in combination, are nearly as common.

The entire extent of Walden's Ridge is underlaid with veins of coal, and iron ore is plentiful, especially in the foot hills. The coal and iron are successfully mined in many places on the eastern slope; on the western they are nearly untouched for the want of transportation. I find that the impression prevails that the minerals of the Cumberlands are largely controlled by land agents and speculators. This is only true as applied to a very small part of the whole, not more than one per cent. The mineral ownership remains with the lands almost entirely.

The prevailing winds on Walden's Ridge are from the southwest, northerns and northeasters are of rare occurrence. One old lady who had resided there for forty years, in answer to my query upon this subject, said: “Nine days out of ten, the year round, I can smell Alabama in the air.” This was the usual testimony of the residents. Winds of great velocity never occur there. In summer, there is always an evening breeze, commencing at 4 to 6 o'clock, and continuing until after sunrise the next morning. In times of rain, clouds hang low over the ridge occasionally, but they never have fogs there.

The range of the thermometer is less on the Table-lands than in the adjacent valleys. I have had access to the carefully taken observations of the Lookout Mountain Educational Institute, such published accounts as have been made by Professor Safford, State Geologist; Mr. Killebrew: the thorough and pains-taking private record of Capt. John P. Long, of Chattanooga, and many more of less length of time. From all these I deduce the fact that the summer days are seven or eight degrees cooler on the mountains than in the Tennessee valley at Chattanooga, and five or six degrees cooler than in the Sequatchee valley, as far up as Dunlap and Pikeville. The nights on the table are cooler than in the lower lands by several more degrees than the days, how much I have thus far not been able to state. The late fall months, the winter and early spring are not so much colder than the valleys as the summer months, the difference between the average temperature of the mountains and valleys being at that time four or five degrees less than in the summer. There is no record of so hot a day ever having occurred on the Cumberland Mountains as to cause mercury to run so high as 95 deg. F., or so cold a day as to cause it to run so low as 10 deg. below zero.

In the average winter the ground rarely freezes to a greater depth than two or three inches, and remains frozen but a few days at a time. Ice has been known to form eight inches thick, but in ordinary winters, three or four inches is the maximum. Snow falls every winter, more or less, and sometimes remains for a week. Old people have a remembrance of a foot of snow which lasted for a week.

Walden's Ridge has a total population of a little more than 4,000, scattered over 600 square miles of surface. The number of dwellings is about 800. Ninety per cent. of these are log houses; seventy per cent. of them are without glass windows, light being furnished through the doorways, always open in the day time, the shuttered window openings and the open spaces between the logs of the walls. Less than two per cent. of these houses have plastered walls or ceilings, and less than five per cent. have ceiled walls or ceilings.

About twenty per cent. of them are fairly well chinked with clay between the logs, the remainder being but indifferently built in that particular. Fully ninety per cent. of these abodes admit of free access of air at all times of day and night, through the floors beneath as well as the walls and roof above. It is the custom of the people to guard against the coldest of days and nights by hanging bed-clothes against the walls, and many good house wives have a supply of tidy drapery which they keep alone for this purpose.

Wood, always at hand, is the only fuel in use. The whole heating apparatus consists of one large open fire-place, built of stone, communicating with a large chimney outside the house at one end, and frequently scarcely as high as the one-story building which supports it. This chimney is constructed in such a manner as to be a great ventilator of the whole room, quite sufficient, it would be thought, if there were no other means of ventilation. It is usually made of stone at the base, and that part above the fire is of sticks laid upon one another, cob house fashion, and plastered over inside and between with similar clay, as that with which the house walls are chinked.

Very few of these houses are more than one story high. They are all covered with long split oak shingles, the people there call them "boards," rifted from the trunks of selected trees. There is no sheathing on the roof beneath these shingles. They are nailed down upon the flat hewn poles running across the rafters, at convenient distances. Looking up through the many openings in the roof in one of these houses, one would think that this would be but poor protection against rain, but they rarely leak.

Not one family in fifty is provided with a cooking stove. They bake their bread in flat iron kettles, with iron covers, covered with hot coals and ashes. These they call ovens. The meat is fried, with only the exception of when accompanied by "turnip greens."

The question, "What is the principal food of the people who live on these mountains?" has been asked by me several hundred times. The almost invariable answer has been, "Corn bread, bacon and coffee." Occasionally biscuits and game have been mentioned in the answers. All food is eaten hot. Coffee is usually an accompaniment of all three meals, and is drank without cream and often without sugar. Some families eat beef and mutton for one or two of the colder months in the year, on rare occasions, though beef is commonly considered "onfit to go upon," as I was told upon several occasions, and mutton sustains less reputation. Chickens are used for food while they are young and tender enough to fry, on occasions of quarterly meetings, visits of "kinfolks," or the "preachers," and the traveling doctors. Fat young lambs are plenty in many settlements from March to October, and can be had at fifty cents each, but I could not learn that one was ever eaten.

A large majority of the adult population use tobacco in some shape—the men by chewing or smoking—the women by smoking or dipping snuff. They never have dyspepsia, nor do they ever get fleshy, after they pass out of childhood, though nearly all the children are ruddy in appearance, and well rounded with fat.

One physical type prevails among the people in middle life, and carries along into old age with but little change; and old age is common there. Nearly every house has its old man or old woman, or both. Everybody, father and mother, and frequently grandfather and grandmother, are still on hand looking as brisk and moving about as lively as the newer generations. After they pass their first forty years they never seem to grow any older for the next twenty or thirty, and the grandfathers and grandmothers can scarcely be selected by comparison, from their own children and grandchildren. The men are taller than the average, and the women, relatively, taller than the men. They are all thin featured, bright eyed, long haired, sharp looking people, with every appearance of strength and power of endurance.

I think the men who live on Walden's ridge can safely challenge the world as walkers, aborigines and all, and unless the challenge should be accepted by

their own women folks, I feel quite sure they would "win the boots." They go on foot everywhere, and never seem to tire.

Nearly all the people of the table-lands are employed in pursuits of agriculture. Very few of them seem to be hard workers. The men are all great lovers of the forest sports, much given to the good, reliable, old fashioned long rifles. The women and children are much employed in out-door occupations, and live a great portion of their time in the open air. The clothing of all classes is scanty. The use of woolen fabrics for underwear has not yet been introduced, and coarse cotton domestic is the universal shirting, and cotton jeans, or cotton and wool mixed, constitute the staple for outer wearing apparel. The men wear shoes throughout the year much more commonly than boots. They never wear gloves, mittens, scarfs or overcoats, and they scorn umbrellas. Probably this whole 4,000 people do not possess two dozen umbrellas, or thrice as many overcoats. The women go about at home with bare feet, a great part of the summer. They never wear corsets or other lacings.

I have learned by careful inquiry that very of the people of the ridge have ever had the diseases of childhood. Scarlet fever I could hear of in but two places, and I suppose that not one person in fifty has had it. Whooping cough and measles have occurred but rarely, and the large majority have not yet experienced the realities of either. Very few people there have ever been vaccinated, nor has smallpox ever prevailed. Typhoid, typhus and inremittent fevers are unknown. In the great rage of typhoid fever which took place ten or twelve years ago in the Tennessee and Sequachee valleys, not a single case occurred on the mountains, as I have been informed by physicians who were engaged in practice in the neighborhood at the time. Diphtheria has never found a victim there; so of croup. Nobody has nasal catarrh there, and a cold or a cough is exceedingly rare.

I have said that these observations refer more particularly to Walden's ridge than to the Cumberland Table-lands in our State as a whole. This ridge was chosen by me for this examination, mainly for the reason of its convenience, but particularly owing to its being more generally settled than any other equal portion of the table which lies in Tennessee. Lookout mountain is not as well located; it is on the wrong side of the Tennessee river, and but a few acres of it belong in this State. Sand mountain is altogether out of the State, but it is perhaps nearer like Walden's ridge in its physical features than Lookout. That part of the Cumberlands west of Sequatchee valley is Walden's in duplicate, excepting that it is further west, and nearer the Middle Tennessee basin. There are some small towns, villages of miners, and summer resorts there, which interferes with that evenness of the distribution of population which Walden's ridge has, rendering it more liable to visitation of epidemic and contagious diseases. The table-lands north of the center line of the State, above Grassy Cove, are very similar to Walden's ridge, as far up as Kentucky, with the exception before mentioned, that of climate—it being from one to ten degrees colder in winter.

This whole Cumberland table is no small country. It comprises territory enough to make a good sized State. At present, it is almost one great wilderness, in many particulars as unknown as the Black Hills. It is coming into the world now, and will be well known in a few years. The great city of Cincinnati has determined to build a railroad through the very center of this great table in the north part of the State, connecting with Chattanooga in the southern part. This road is nearly bored through, and in another year or two, the Cumberland Table-lands in Tennessee will be much heard of at home and abroad.

It seems to me this country has merits. It is located in the latitude of mild climate; not so far south as to be scorched by the hot summer sun, or visited by the great life destroying epidemics; nor so far north as to meet the severe and lengthened winters.

Climate, we know, is a fixture; it has a government; it has rules; the weather may change, but climate does not; it is a permanent, out-door affair, and

what is true of to-day, was true centuries ago, and will be true forever—in the measure of any practical scope, at least. The people of the world are beginning to know that the greatest destroyer of human life has its remedy in climate.

Mr. Lombard, in his famous exhibit in relation to the prevalence of consumption among the people of different occupations, circumstances of life and place of dwelling, gives the lowest number of deaths from this cause, to those who live in the open air. He found the people who lived most in the open air, as would be readily conjectured, in the mild latitudes, not in the countries of hot sands or cold snows."

Remarks.

This Cumberland plateau contains some very fine springs and places of resort, west of Chattanooga, some of which we notice in this connection.

Moffat.

This pleasant place of resort is situated on the summit, about 85 miles from Chattanooga, in one of the most cheering little spots on the mountain. This new town was built up by the indomitable energy of John Moffat, Commissioner of Immigration for Tennessee. About five years ago he invested in some lands on the mountain for the purpose of raising fruits, etc. Selecting the present site of Moffat, where was nothing but a forest a log cabin or two, he set men to work clearing away and laying the foundation of a prosperous town. In six months there were school houses, stores, a planing and saw mill, hotel, etc. etc., and from that period has progressed slowly but surely until now; and for a mountain town it cannot be excelled. There has since been added a cigar factory, shoe factory, stores and quite a little population. Nature has done much for the locality. The air is pure and refreshing; fine springs of water, chalybeate and freestone, gush out from beneath rocks and crags in a short distance of the hotel. The surrounding country is made up largely of a new population whose pursuits are almost the same in every respect—the raising of grapes, apples, peaches pears, etc., which grow to such fine perfection on this plateau.

This is one of the localities, on this mountain, where refinement, and culture, and industry are the characteristics of the people to a large extent.

The Swiss Colony is situated within a few miles of Moffat, in Grundy county. They are an industrious people and are said to be doing well on an average.

Sewanee

is situated on the Cumberland plateau in Franklin county, about 75 miles from Chattanooga. It is the site of the "University of the South," an institution in which the state, indeed the whole South, is much interested. Fine water, good hotel, &c.

Matters of Interest to Those Coming to this State.

Redemption.--Real estate sold for debt is redeemable any time within two years, unless upon application of complainant the Court decree it be sold under 6 months, or for 2 years, and that upon confirmation by Court, the title shall be absolute to the purchaser.

Exemptions.--A homestead in the possession of each head of a family and the improvements thereon, to the value of \$1,000 is exempt from sale or execution, under legal process--including farming implements, bedding, etc.

Liens.--Upon any lot of ground upon which a house has been constructed, built or repaired, machinery furnished, etc., under contract with the owner or his agent, there is a lien in favor of the mechanic or party so furnishing such material, etc.. Each mechanic employed has a lien in proportion to work done, or material furnished.

Naturalization.--Any alien, being a free white person, may be admitted to become a citizen of the United States, on these conditions: That he shall have declared on oath or affirmation, before the Supreme, Superior, District or Circuit Courts of some one of the States, or of territorial districts of the United States, or a Circuit or District Court of the United States, two years at least before his admission, that it was *bona fide* his intention to become a citizen of the United States, and renounce all fidelity to every foreign state or sovereignty, etc., and support the Constitution of the United States, etc., etc.

A few words about the misrepresentations of Tennessee: (1). As regards ignorance: In no State in the Mississippi Valley can be found better educated men and women; though the number who do not read or write is larger than it should be. (2). As to prejudice against a man simply because he is a laborer: to a limited extent this is true—not so much so as in other States; and when some of the “codfish aristocracy” die there will be a decided change in this respect. (3.) As to selfishness of our land-owners in wanting to hold too much land: Only to a certain extent is this so; most of them are anxious and ready to sell at reasonable rates.

Finally, if you come to Tennessee, do not expect to find an Eldorado all at once; but a country that can be made one with the proper exertions on the part of the people.

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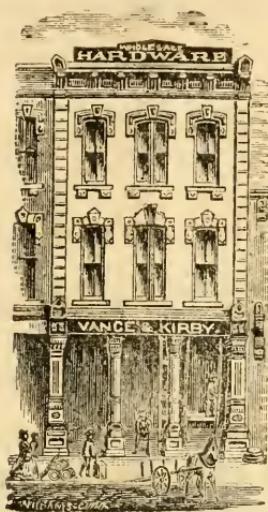
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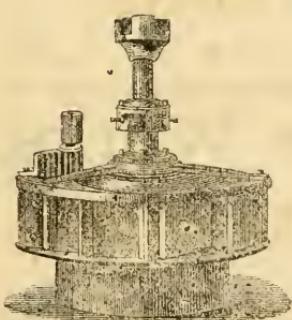
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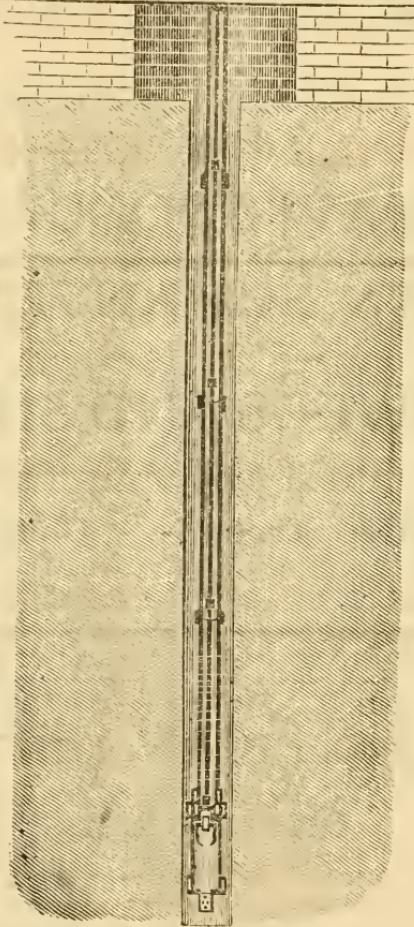
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